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## 2009 Joint CBRN Conference & Exhibition

*“Full Spectrum CBRN Operations”*

Fort Leonard Wood, MO

23 - 25 June 2009

[Agenda](#)  
[Revised Agenda](#)

Wednesday, 24 June, 2009

### SESSION I - BAKER THEATER- GLOBAL SECURITY AND HOMELAND DEFENSE

#### CHIEF OF CHEMICAL WELCOME

- [COL \(P\) Les Smith](#), Commandant, US Army CBRN School

#### FORT LEONARD WOOD WELCOME AND MANSCEN OVERVIEW

- [MG Gregg Martin](#), Commanding General, US Army Maneuver Support Center
  1. [Why I joined](#) wmv video file
  2. [CPT Smiley](#) wmv video file
  3. [JIAISMNFSCOE](#) wmv video file

#### KEYNOTE ADDRESS

- [Mr. Tim Morgan](#), Chief of Staff, Office of the Assistant Secretary of Defense for Global Strategic Affairs

Mr. Peter Bechtel, Director, U.S. Army Nuclear and Combating WMD Agency

[MG Daniel Long](#), Commanding General, JTF Civil Support, USNORTHCOM

1. [Sudden Response](#) wmv video file

MAJ Gen Donald Fick, Director of Force Structure, Resources and Assessment (J8), National Guard Bureau

BG Jess Scarbrough, Joint Program Executive Officer for Chemical and Biological Defense

[Mr. Vince Nardy](#), Chairman, CBD Acquisition Initiatives Forum

[Mr. Ron Evans](#), Director, CBRN Information Analysis Center

Thursday, June 25, 2009

### SESSION II - BAKER THEATER-CBRN DEFENSE AND WARFIGHTER READINESS

#### KEYNOTE ADDRESS

- [Mr. Jean Reed](#), Deputy Assistant to the Secretary of Defense for Chemical and Biological Defense/Chemical Demilitarization

[Ms. Dee Dodson Morris](#), Chief of Staff, Joint Requirements Office for Chemical, Biological, Radiological and Nuclear Defense

[Dr. Darrel Galloway](#), Director, Chemical and Biological Technologies and Joint Science & Technology Office for Chemical and Biological Defense, DTRA

[Mr. James Cooke](#), Joint Chemical and Biological Defense Test & Evaluation Executive

[Upcoming Events](#)



# Tennessee Valley Federal Small Business Programs Conference



*"Collaborating for  
Success"*

**June 30 – July 2, 2009**

**Huntsville, AL**



# National Security Space Policy & Architecture Symposium (SCI Level Clearance)



**July 23 - 24, 2009**

**Chantilly, VA**



# Pacific Operational Science & Technology Conference & Exhibition



*"Synchronizing Operators  
and Technologists"*

**August 3 - 6, 2009**

**Honolulu, HI**



# Warheads & Ballistics Symposium



**August 3 - 6, 2009**  
**Monterey, CA**



# C4ISR Breakfast



**August 4, 2009**  
**Pentagon City, VA**



# Mastering Business Development Workshop for Small Business



*"...acquire the knowledge,  
thinking, skills and discipline  
for proactive Business  
Development..."*

**August 4 - 5, 2009**  
**Annapolis, MD**



# 2009 Missile Defense Agency Small Business Innovation Research Industry Day



**August 11 - 12, 2009**  
**Long Beach, CA**



# Land & Maritime Supply Chains Business Conference & Exhibition (DSCC)



*" Connecting Suppliers to  
Warfighters... "*

**August 17 - 19, 2009**  
**Columbus, OH**



# Joint ADL Co-Lab Implementation Fest 2009



**August 18 - 20, 2009**  
**Orlando, FL**



# Expeditionary Warfare Division Wargame



**August 25 - 26, 2009**  
**MCB Quantico, VA**



# Missile Defense Small Business Advocacy Conference



*"Information Technology"*

**Aug 31 – Sep 1, 2009**  
**Colorado Springs, CO**



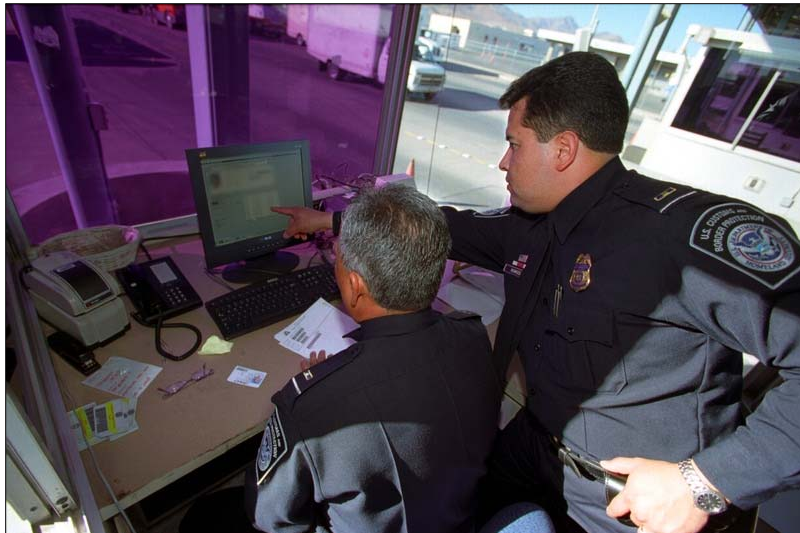
# SO/LIC Executive Breakfast



**September 1, 2009**  
**Washington, DC**



# 2009 Homeland Security Symposium and Exhibition



*“Building a Resilient & Sustainable Homeland – Public and Private Sector Partners Serving America”*

**September 9 - 10, 2009**  
**Arlington, VA**



# Mastering Business Development Workshop



*"...acquire the knowledge,  
thinking, skills and discipline  
for proactive Business  
Development..."*

**September 15 - 16, 2009**  
**Greenwood Village, CO**



# 2009 Undersea Warfare Technology Fall Conference

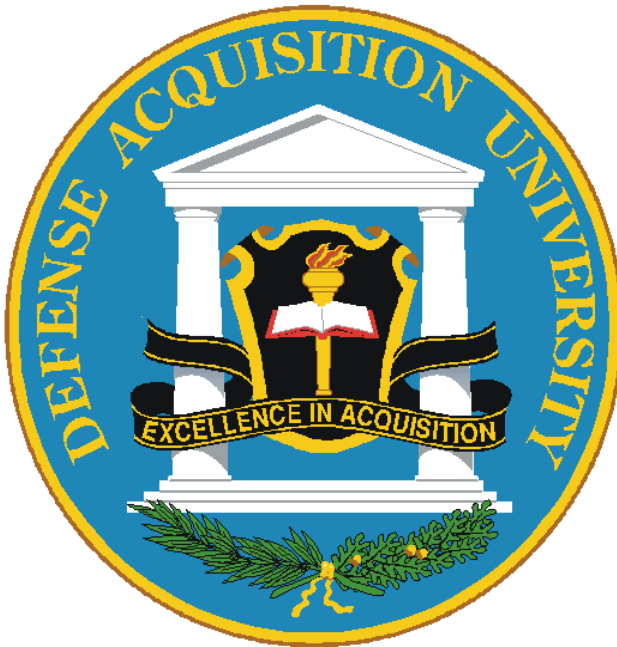


*"Undersea Warfare: Full  
Spectrum Capabilities to  
Preserve Freedom of the Seas"*

**September 21 - 24, 2009**  
**Groton, CT**



# Defense Systems Acquisition Management Course (DSAM)



**September 21 - 25, 2009**  
**Nashville, TN**



# Stability, Security, Transition and Reconstruction Operations Conference

*“Working in the Same Space:  
International Outreach and its  
Implications on Diplomacy,  
Development, and Defense”*



**September 28 - 29, 2009**  
**Pentagon City, VA**



# 2009 Women In Defense National Fall Conference

*“Innovation, Inspiration,  
Imagination: Incentives for  
the Future ”*



**September 29 , 2009**  
**Alexandria, VA**



# U.S. - UK - Canada Defense Industry Trilateral Symposium



*“Promoting Defense and Security Through Trade and Cooperation.”*

**October 2, 2009**

**Arlington, VA**



# Combat Vehicles Conference



**October 12 - 14, 2009**  
**Dearborn, MI**



# 2009 TACOM Life Cycle Management Command APBI

**October 14 - 16, 2009**

**Dearborn, MI**



# Disruptive Technologies Conference



**October 14 - 15, 2009**  
**Washington, DC**



# 47th Annual Targets, UAVs & Range Operations Conference & Exhibition



*“Test and Training in a Time  
of Change”*

**October 21 - 23, 2009**  
**Savannah, GA**



# 12th Annual Systems Engineering Conference



**October 26 - 29, 2009**

**San Diego, CA**



# Technical Information Division Conference



**NDIA** Technical Information Division

*“CDM Fulfillment in the  
Systems Engineering  
Environment”*

**October 26, 2009  
San Diego, CA**



# Precision Strike Technology Symposium



**October 27 - 29, 2009**  
**Laurel, MD**



# Mastering Business Development Workshop



*"...acquire the knowledge,  
thinking, skills and discipline  
for proactive Business  
Development..."*

**November 3 - 4, 2009**  
**Herndon, VA**



# Aircraft Survivability Symposium (Secret US Only)



*“Next Generation  
Requirements”*

**November 3 - 6, 2009**

**Monterey, CA**



# USCG Innovation EXPO

**November 16 - 19, 2009**  
**Virginia Beach, VA**



# 14th Annual Expeditionary Warfare Conference



*“Expeditionary Warfare in a  
Complex Joint Operating  
Environment”*

**November 16 - 19, 2009**  
**Panama City, FL**



# 9th Annual CMMI Technology Conference



**November 16 - 19, 2009**

**Denver, CO**





2009  
**JOINT CBRN**



CONFERENCE & EXHIBITION

**“Full Spectrum CBRN Operations”**



JUNE 23-25, 2009

[WWW.NDIA.ORG/MEETINGS/9300](http://WWW.NDIA.ORG/MEETINGS/9300)

FORT LEONARD WOOD, MISSOURI

EVENT #9300



2009 JOINT CBRN  
AGENDA

TUESDAY JUNE 23, 2009

3:00 PM - 6:00 PM — REGISTRATION OPENS

5:00 PM - 6:00 PM — WELCOME RECEPTION IN EXHIBIT TENT

WEDNESDAY JUNE 24, 2009

7:30 AM - 9:00 AM — REGISTRATION AND CONTINENTAL BREAKFAST  
EXHIBITS TENT

7:30 AM - 6:30 PM — EXHIBITS OPEN  
EXHIBITS TENT

9:00 AM - 3:30 PM — SESSION 1:  
BAKER THEATER  
**GLOBAL SECURITY AND HOMELAND DEFENSE**

9:00 AM - 9:45 AM — OPENING COMMENTS  
BAKER THEATER

NDIA WELCOME  
BG DEAN ERTWINE, USA (RET)  
CHAIRMAN, CBRN DIVISION, NDIA

CHIEF OF CHEMICAL WELCOME  
COL (P) LES SMITH  
COMMANDANT, US ARMY CBRN SCHOOL

FORT LEONARD WOOD WELCOME AND MANSCEN OVERVIEW  
MG GREGG MARTIN  
COMMANDING GENERAL, US ARMY MANEUVER SUPPORT CENTER

9:45 AM - 10:15 AM — *KEYNOTE ADDRESS*  
MR. TIM MORGAN  
CHIEF OF STAFF, OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE FOR GLOBAL STRATEGIC AFFAIRS

10:15AM - 10:30AM — BREAK



# WEDNESDAY JUNE 24, 2009 CONTINUED

10:30 AM - 11:00 AM — MR. PETER BECHTEL

DIRECTOR, U.S. ARMY NUCLEAR AND COMBATING WMD AGENCY

11:00 AM - 11:30 AM — MG DANIEL LONG

COMMANDING GENERAL, JTF CIVIL SUPPORT, USNORTHCOM

11:30 AM - 1:30 PM — LUNCH

EXHIBITS TENT

1:30 PM - 2:00 PM — MAJ GEN DONALD FICK

DIRECTOR OF FORCE STRUCTURE, RESOURCES AND ASSESSMENT (J8), NATIONAL GUARD BUREAU

2:00 PM - 2:30 PM — BG JESS SCARBROUGH

JOINT PROGRAM EXECUTIVE OFFICER FOR CHEMICAL AND BIOLOGICAL DEFENSE

2:30 PM - 2:45 PM — MR. VINCE NARDY

CHAIRMAN, CBD ACQUISITION INITIATIVES FORUM

2:45 PM - 3:00 PM — MR. RON EVANS

DIRECTOR, CBRN INFORMATION ANALYSIS CENTER

3:00 PM - 3:30 PM — COL MARK MALATESTA

JOINT PROGRAM MANAGER FOR GUARDIAN, JPEO CBD

3:30 PM — CLOSING COMMENTS, DAY 1

BG DEAN ERTWINE, USA (RET)

3:30 PM - 5:00 PM — VISIT OUTDOOR EXHIBITS AND DEMONSTRATIONS

OUTSIDE OF EXHIBIT TENT

5:00 PM - 6:30 PM — NDIA RECEPTION

EXHIBITS TENT



2009 JOINT CBRN  
AGENDA

THURSDAY JUNE 25, 2009

7:30 AM - 9:00 AM — REGISTRATION AND CONTINENTAL BREAKFAST  
EXHIBITS TENT

7:30 AM - 1:30 PM — EXHIBITS OPEN  
EXHIBITS TENT

8:50 AM - 3:30 PM — SESSION 2:  
BAKER THEATER  
**CBRN DEFENSE AND WARFIGHTER READINESS**

8:50 AM - 9:15 AM — OPENING COMMENTS  
BAKER THEATER

NDIA WELCOME  
COL FRANK COX, USA (RET)  
NDIA, CBRN DIVISION

YEAR OF THE NCO  
CSM TED LOPEZ  
11<sup>TH</sup> REGIMENTAL CSM, US ARMY CHEMICAL CORPS

9:15 AM - 9:45 AM — *KEYNOTE ADDRESS*  
MR. JEAN REED  
DEPUTY ASSISTANT TO THE SECRETARY OF DEFENSE FOR CHEMICAL AND BIOLOGICAL DEFENSE / CHEMICAL DEMILITARIZATION

9:45 AM - 10:15 AM — RADM ARCHER M. MACY  
DIRECTOR, JOINT REQUIREMENTS OFFICE (J-8), THE JOINT STAFF

10:15 AM - 10:30 AM — BREAK

10:30 AM - 11:00 AM — DR. DARREL GALLOWAY  
DIRECTOR, CHEMICAL AND BIOLOGICAL TECHNOLOGIES AND JOINT SCIENCE & TECHNOLOGY OFFICE FOR CHEMICAL AND BIOLOGICAL DEFENSE, DTRA

11:00 AM - 11:30 AM — MR. JAMES COOKE  
JOINT CHEMICAL AND BIOLOGICAL DEFENSE TEST & EVALUATION EXECUTIVE

11:30 AM - 1:30 PM — LUNCH  
EXHIBITS TENT



# THURSDAY JUNE 25, 2009 CONTINUED

1:30 PM — EXHIBITS CLOSE

1:30 PM - 2:30 PM — PANEL: YEAR OF THE NCO INITIATIVES

- ◆ CSM TED LOPEZ, REGIMENTAL CSM, US ARMY CHEMICAL CORPS
- ◆ CSM PAT ALSTON, SENIOR ENLISTED ADVISOR, DTRA
- ◆ CSM MARVIN WOMACK , CSM, 20<sup>TH</sup> SUPCOM (CBRNE)

2:30 PM - 3:00 PM — BG JEFF SNOW  
COMMANDING GENERAL, 20<sup>TH</sup> SUPCOM (CBRNE)

3:00 PM - 3:30 PM — COL (P) LES SMITH  
COMMANDANT, US ARMY CBRN SCHOOL AND 25<sup>TH</sup> CHIEF OF CHEMICAL

3:30 PM — CLOSING COMMENTS  
BG DEAN ERTWINE, USA (RET)  
CHAIRMAN, CBRN DIVISION, NDIA

4:00 PM CONFERENCE ADJOURNS



# 2009 JOINT CBRN EXHIBITS INFORMATION

## EXHIBITOR LIST (AS OF 6/10/2009)

20/20 BioResponse	1126	HDT, Engineered Technologies	7	Raytheon Technical Services	1002
20th Support Command (CBRNE)	1102	ICx Technologies	807	Reactive Surfaces	1125
AdVnt Biotechnologies	1007	ICx Technologies	8	REMPLOY FRONTLINE	610
AFRL-TBMCS-UL/UC2	1213	Idaho Technology, Inc.	927	RSDecon - A Bracco Company	426
Ahura Scientific, Inc.	715	IEM	607	SafetyTech International, Inc.	708
Air Techniques International	823	INFICON	623	SAIC	808
AirBoss-Defense	528	InnovaPrep	1227	SAIC	11
Airogistic LLC	1223	Intelagard	824	Scott Health & Safety	424
AkzoNobel Aerospace Coating	1013	iRobot Corporation	701	Signature Science, LLC	712
Alaska Structures	1008	ISOVAC Products LLC	1209	Smiths Detection	411
All American Cleaning Systems	625	ITT AES	716	SolaRover	9
Alluvium LLC	612	JCBRN 2009	1108	STERIS Corporation	1016
Argon Electronics	514	JFCOM Static Display	5	SupplyCore Inc.	1104
AristaTek	726	Joint Research and Development, Inc.	527	Syracuse Research Corporation	827
Asynchrony Solutions	508	JPEO for Chem Bio Defense	202	Teledyne Brown Engineering	1028
Avon	516	JPEO for Chem Bio Defense	101	Tetracore, Inc.	624
Battelle	916	JPEO for Chem Bio Defense	102	Tex Shield	602
Biological Chemical Protection Services	1113	JPEO for Chem Bio Defense	107	The Hughes Group	111
Bruker Daltonics NBC Detection Corp.	802	JPEO for Chem Bio Defense	408	TMTI	1207
Bruker Daltonics NBC Detection Corp.	804	JPM- Decon 3 Military Static Display	1	TSI Incorporated	510
Camber Corporation	926	JPM- Decon Sanijet	2	U.S. Army ECBC	1112
CBRNe World	628	Kalman & Company, Inc.	1211	US Army Dugway Proving Ground	401
CBRNIAC	626	Kappler Inc.	1023	US Army Engineering School-DEI	1110
Center for National Response	1127	L-3 Communications, Linkabit	526	USAA	724
Clean Earth Technologies, LLC	711	Lattice Incorporated	611	Utilis USA	12
Climatronics Corporation	1118	Laurus Systems	608	W.L. Gore & Associates, Inc.	814
Concurrent Technologies Corporation	523	Lockheed Martin	908	Warwick Mills, Inc.	1225
CON-SPACE Communications Inc.	912	Los Alamos National Laboratory	1114	Wel-Fab, Inc	723
CRISTANINI S.p.A	1015	MacAulay-Brown, Inc	1027	Y-12 National Security Complex	1025
CUBIC Applications, Inc	1201	Microbial-Vac Systems Inc.	627	Zaphyr technology Corp.	1117
CUBRC	427	Military Medical Technology	1115		
Decon Systems	3	Modec, Inc.	1011		
Defense Group Inc. / CoBRA Software	707	Morphix Technologies	614		
DeltaNu	828	Mountain Top Technologies	1014		
Draeger Safety, Inc.	928	MSA	901		
DRASH (DHS Systems, LLC)	13	NABCO, Inc.	613		
DRS Technologies	702	NDIA	1124		
DRS Technologies	14	NISH	914		
DTRA / JSTO	402	NNSA's National Secure Manufacturing	825		
Dycor	512	Northrop Grumman	902		
EGG/LSI	1026	Nucsafe, Inc.	1024		
EnviroNics USA	728	Oak Ridge National Laboratory	923		
Esensors, Inc	713	OI Analytical/CMS Field Products	609		
Evogen (formerly Sceptor Industries)	518	OptiMetrics, Inc.	1215		
Federal Resources	524	ORTEC	818		
First Line Technology	615	Parsons	913		
Foster-Miller, Inc.	917	PAUL BOYE TECHNOLOGIE	924		
GE Security - Homeland Protection	1101	PDQ Precision, Inc.	1116		
Genencor	617	Photon Systems, Inc.	425		
General Dynamics ATP	502	Pine Bluff Arsenal	616		
Geomet Technologies, LLC	816	Production Products	709		
Germfree Labs, Inc.	10	Proengin Inc.	811		
Global Ground Support	1128	QuickSilver Analytics, Inc.	428		
HDT, Engineered Technologies	1123	RAE Systems	915		



Live  
Demo  
Area



## OUTDOOR EXHIBITS



# FIRST RESPONDERS' FIRST CHOICE.



**A New Breed of  
First Responder**

**CoBRA software** serves as a Decision Support Tool for the full spectrum of CBRNE incident management; including preplanning, collaboration, training, response, and presumptive identification.

CoBRA supports the dismounted war fighter during Sensitive Site Exploitation, IED defeat, and HAZMAT response involving everything from TICs/TIMS to WMD.

**To learn how CoBRA software is currently supporting the CBRNE community:**

- Visit our booth at Joint Chemical Conference
- Visit our website: [www.cobrafirstresponder.com](http://www.cobrafirstresponder.com)
- Email us at: [CoBRASales@defensegp.com](mailto:CoBRASales@defensegp.com)
- Call us at: 877-233-5789 X195



**THANK YOU TO OUR SPONSORS!**



**communications**

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Linkabit

**PARSONS**

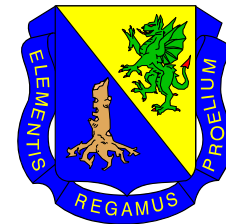
**smiths** detection

bringing technology to life

**TEX SHIELD**

CBRN PROTECTION



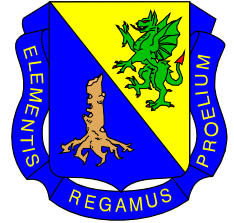


# ***JOINT CBRN CONFERENCE & EXHIBITION***

***23-25 June 2009***



# 2009 Jt CBRN Agenda

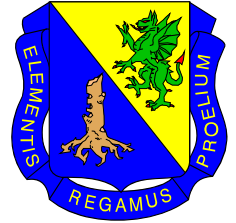


## Wednesday, 24 June

- 0900-0945      Opening Comments
- NDIA Welcome - **BG Dean Ertwine, USA (Ret)**
  - Chief of Chemical Welcome – **COL(P) Les Smith, USA**
  - MANSCEN Welcome & Overview-**MG Gregg Martin, USA**
- 0945-1015      Keynote Address – **Mr. Tim Morgan**
- Chief of Staff, Office of ASD for Global Strategic Affairs
- 1015-1030      Break
- 1030-1100      **Mr. Peter Bechtel**
- Director, US Army Nuclear & Combating WMD Agency
- 1100-1130      **MG Daniel Long, USA**
- CG, JTG Civil Support, USNORTHCOM
- 1130-1330      Lunch in Exhibit Pavilion



# 2009 Jt CBRN Agenda

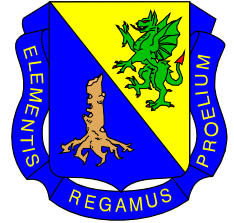


## Wednesday, 24 June (continued)

- 1330-1400      **Maj Gen Donald Fick, USAF**  
- Director of Force Structure, Resources & Assessment (J8), National Guard Bureau
- 1400-1430      **BG Jess Scarborough, USA**  
- JPEO for Chemical & Biological Defense
- 1430-1445      **Mr. Vince Nardy**  
- Chairman, CBD Acquisition Initiatives Forum
- 1445-1500      **Mr. Ron Evans**  
- Director, CBRN Information Analysis Center
- 1500-1530      **COL Mark Malatesta, USA**  
- Joint Program Manager for Guardian
- 1530              Closing Comments, Day 1
- 1530-1700      JPEO-CBD & Industry Demonstrations
- 1700-1830      Reception in Exhibit Pavilion



# 2009 Jt CBRN Agenda

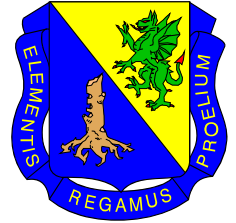


## Thursday, 25 June

- 0850-0915      Opening Comments
- NDIA Welcome - **COL Frank Cox, USA (ret)**
  - Year of the NCO – **CSM Ted Lopez, USA**
- 0915-0945      Keynote Address – **Mr. Jean Reed**
- Deputy Asst to the SECDEF for Chem. & Bio Defense / Chemical Demilitarization
- 0945-1015      **Ms. Dee Dodson Morris**
- Chief of Staff, Joint Requirements Office, Joint Staff
- 1015-1030      Break
- 1030-1100      **COL Mike O'Keefe**
- Deputy Director, Chem. & Bio. Technologies & JSTO for Chemical & Biological Defense, DTRA
- 1100-1130      **Mr. James Cooke**
- Army T&E Executive / Jt. Chem Bio Def T&E Exec
- 1130-1330      Lunch in Exhibit Pavilion



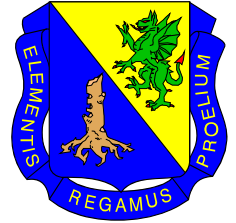
# 2009 Jt CBRN Agenda



## Thursday, 25 June (continued)

- 1330-1430      Panel: year of the NCO Initiatives
- **CSM Ted Lopez**, Regimental CSM, US Army Chemical Corps
  - **CSM Pat Alston**, Senior Enlisted Advisor, DTRA
  - **CSM Marvin Womack**, CSM, 20<sup>th</sup> SUPCOM (CBRNE)
- 1430-1500      **BG Jeff Snow, USA**
- CG, 20<sup>th</sup> SUPCOM (CBRNE)
- 1500-1530      **COL (P) Les Smith, USA**
- Commandant, US Army CBRN School & 25<sup>th</sup> Chief of Chemical
- 1530              Closing Comments
- **BG Dean Ertwine, USA (ret)**
- 1600              Conference Adjourns







- Surveys will be sent to attendees next Monday, 29 June
- Attendees will receive a link to the 2009 proceedings within the next two weeks
- Please plan to attend the 2010 Jt CBRN Conference & Exhibition





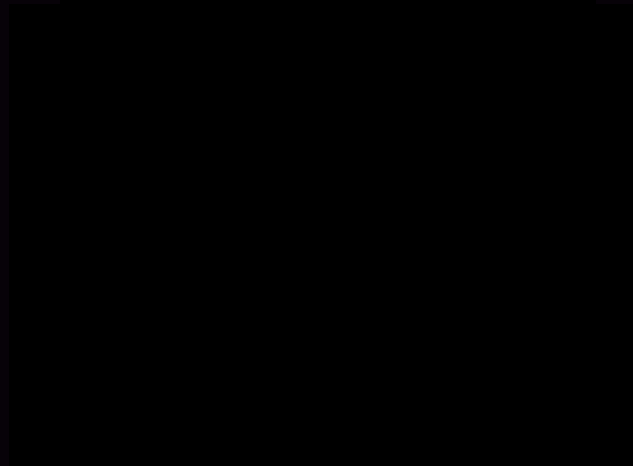
# Test and Evaluation: How Well Your Equipment Performs



*Mr. James C. Cooke, Director  
Deputy Under Secretary of the Army  
Test and Evaluation Office  
25 June 2009*



*Support the Warfighter to accomplish mission!*







# Topics



Why have Test and Evaluation (T&E)?

Who, where, and how is T&E supported?

How is T&E relevant and important to you?

The synergy of T&E and requirements

For more information on CBRND T&E....





# Why Have Test & Evaluation?



- Ensure equipment fielded meets operational need
- Give decision makers information to make informed decisions about what the system brings to the battlefield

*Support the  
Warfighter!*





# Who supports T&E?

## Test and Evaluation Office

### Vision

- **Serve as the SEC ARMY's Independent T&E Advisory link between the requirements, acquisition, and test and evaluation communities**
  - Ensure T&E enterprise is structured and funded to address current and future needs
  - Synchronize all acquisition system evaluation activities
  - Ensure enterprise unity of effort and purpose, to bring best value to our Soldiers faster and at reduced cost

### Mission

- **Oversee all Army T&E Enterprise Missions, Functions, and Resources**
- **Serve as T&E Executive for Army and DoD Chem/Bio Defense Programs**
- **Be the independent senior advisor to SEC ARMY and CSA on all evaluation and test matters**

**DUSA TE is your Test and Evaluation Enterprise Authority**





# Who supports T&E?



## Specified Tasks of the T&E Executive

- Oversight
  - Ensure Adequate and Credible Testing
  - Establish T&E Policy for Army and CBDP
  - Provide POM input to man, equip, train, and sustain ARMY/CBDP T&E Infrastructure
- Approve T&E Documents
- Advise Senior Leadership
- Coordinate and Facilitate
  - Promote early T&E community involvement in planning
  - Provide resolution for T&E issues

**Army General Order 3 provides authority**



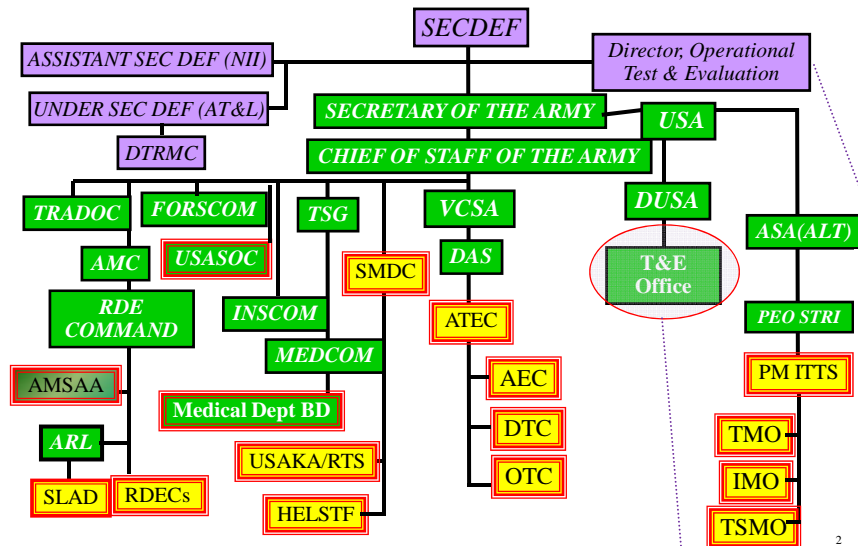


# Who supports T&E?

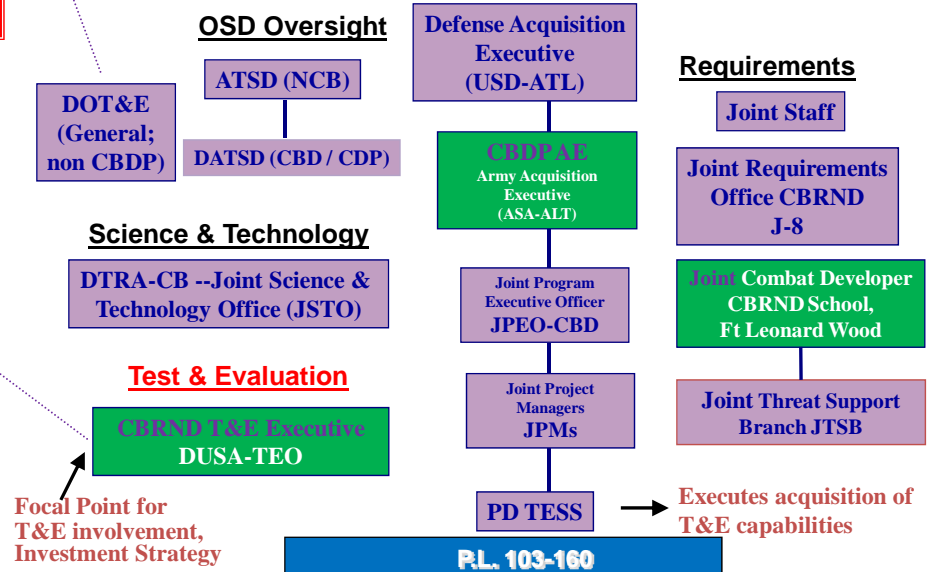


## Army and Chem Bio T&E Communities

### Army T&E Community



### Chemical and Biological Defense Community



Focal Point for  
T&E involvement,  
Investment Strategy

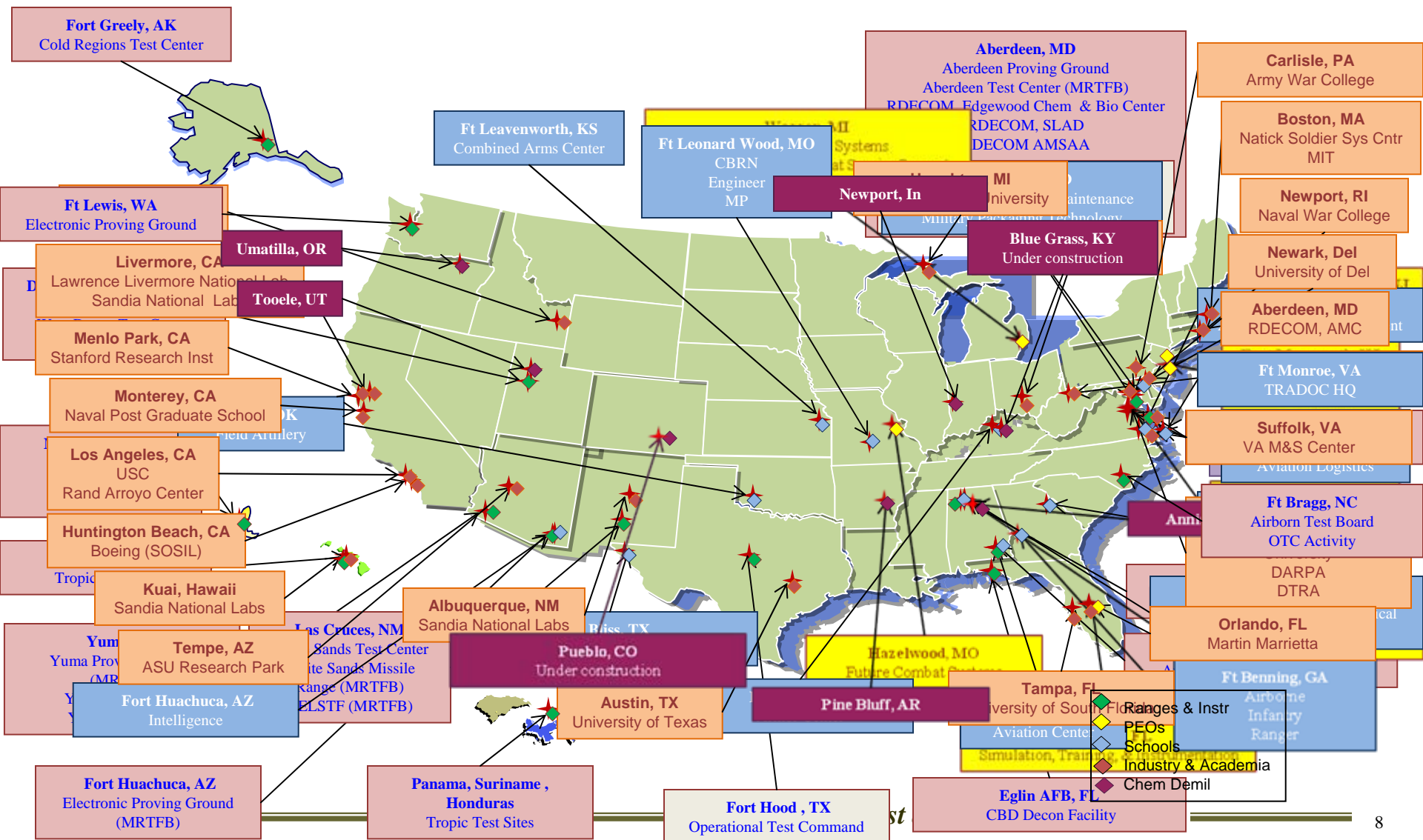
Executes acquisition of  
T&E capabilities





# Where is T&E supported?

## Army T&E Enterprise







# Where is T&E supported?



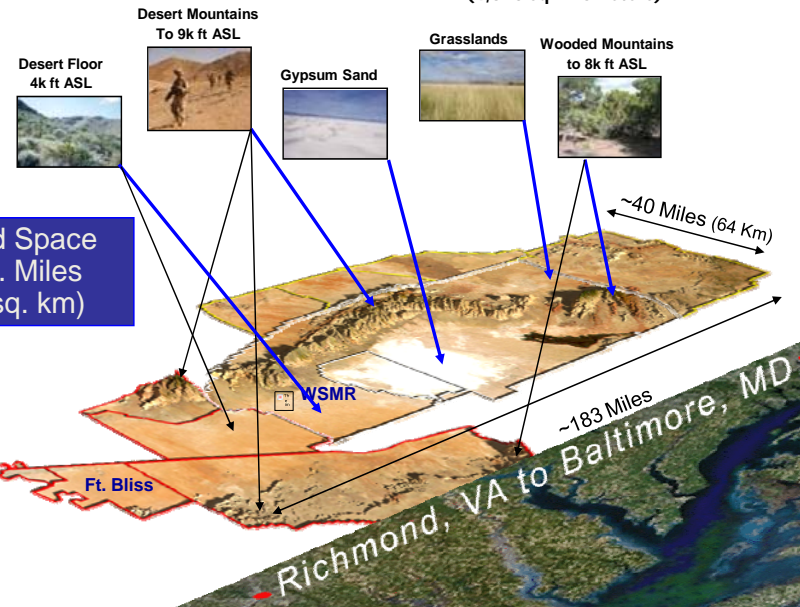
## Magnitude of T&E Infrastructure

### White Sands Missile Range

#### Area of Operations

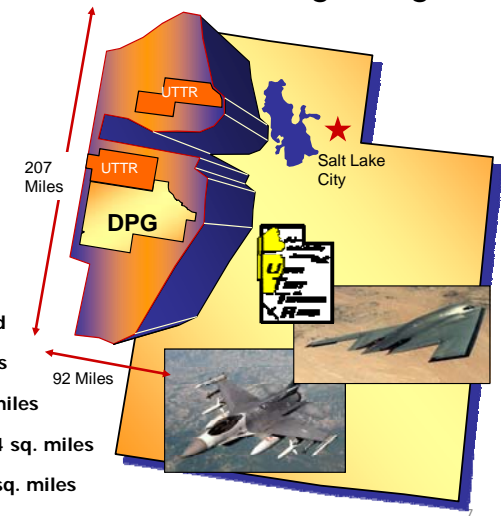
#### Primary Land & Terrain

- WSMR - 3,421 sq. miles (8,859 sq. kilometers)
- Lease agreements - 2,453 sq. miles (6,353 sq. kilometers)
- Ft. Bliss - 1,745 sq. miles (4,520 sq. kilometers)



Army T&E = Over 1/3 of  
Army Land Space

### Dugway Proving Ground: Link with Utah Test and Training Range



- DPG is Chem/Bio MRTFB
- DPG Landspace 1300 sq. miles
- Includes Michaels Army Airfield
- Total Airspace 19,161 sq. miles
- Restricted Airspace 9,158 sq. miles
- Military operations area 10,004 sq. miles
- DOD exclusive use land 3,078 sq. miles
- Government owned land 6,686 sq. miles

*Army Test and Evaluation Office*





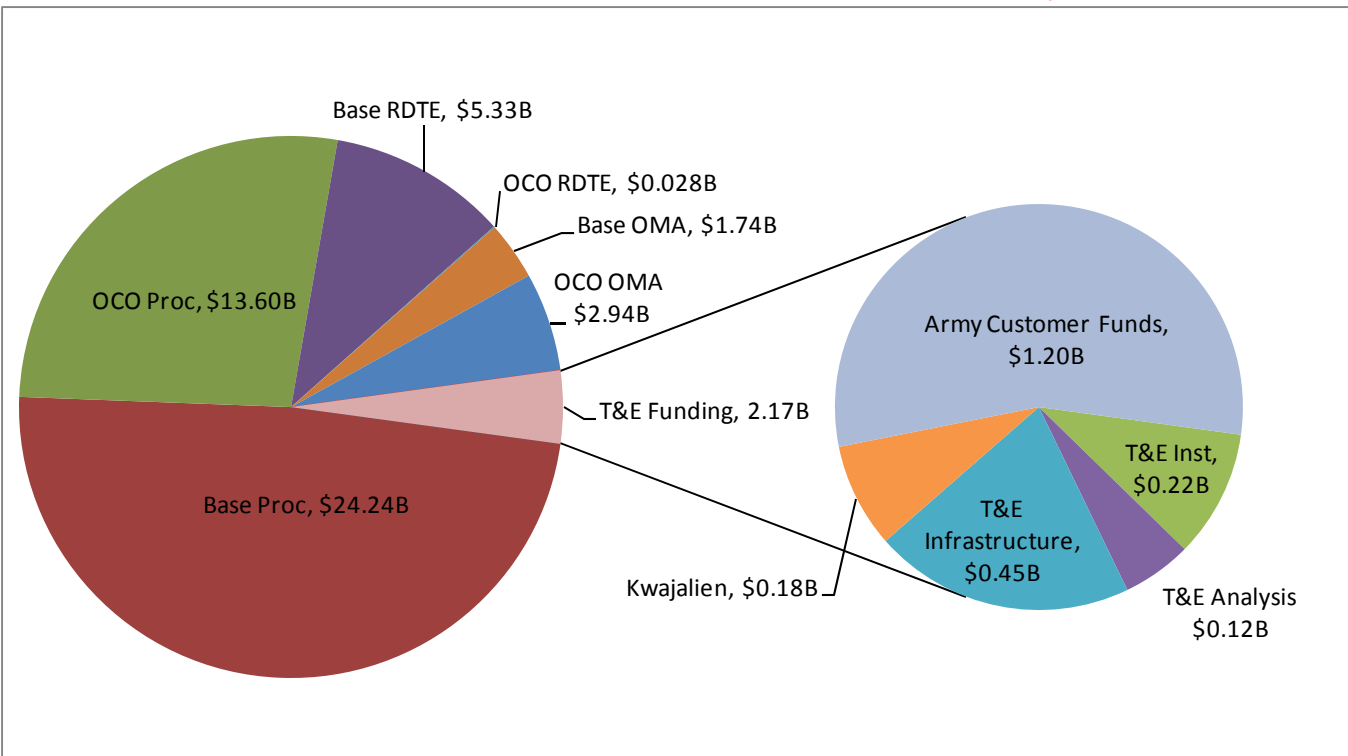
# T&E Enterprise

## High Value for Low Cost



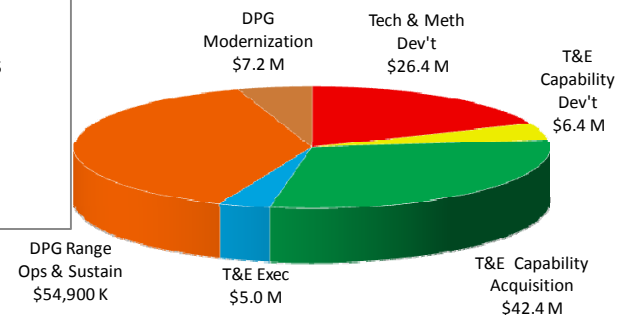
**Army RDA**  
**FY 09 Total: \$50B**

**Army T&E Enterprise**  
**Total: \$2.2B**



### CBDPT&E Funds FY 09 Totals

**OSD CBDP Total: approx \$1.68B**  
**T&E Infrastructure Total: \$142.3M**



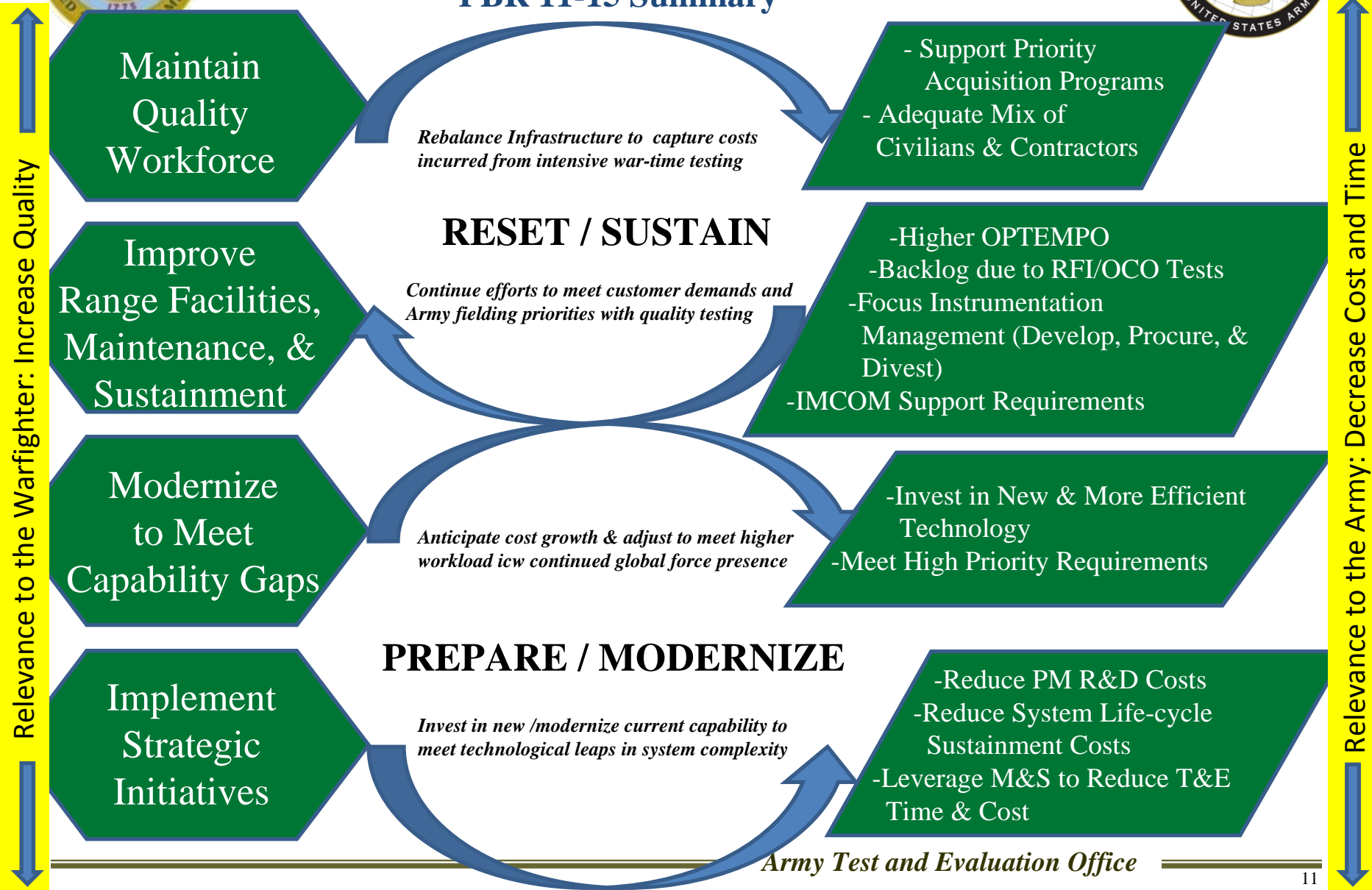
**Ensures Value to Soldiers and Confidence to Congress**



# How is T&E supported?

## Army T&E Resource Campaign Plan:

### PBR 11-15 Summary







# How is T&E relevant and important?



- T&E is a critical part of the acquisition process
- Developmental T&E measure system characteristics and performance  
UNDER THREAT CONDITIONS
- Operational T&E exercises system in operational environments to evaluate mission accomplishment
- Your missions are rigorous → T&E must be rigorous
- T&E tells you how well your systems work and where there may be some limitations

**Better T&E → Better CBRND Systems → Better missions!**





# How is T&E relevant and important?



## Test Standards Critical for Reliable T&E

T&E Capabilities and Methodologies IPT (TECMIPT) - Center of Gravity for CBDP T&E Standards Development

- SMEs on Commodity Area Process Action Teams (CAPATs) review/approve T&E capability:
    - T&E Capability Requirements
    - Validation plans, reports and supporting data
    - Test Operations Procedures (TOPs)
- } T&E Standards for a T&E Capability
- CAPATs thru TECMIPT recommend approval of T&E capability to T&E Executive when standards are validated
  - Rigorous T&E Standards ensure:
    - Repeatable, accurate test data with evaluator buy-in
    - T&E capabilities meet test requirements
    - Test duplication minimized - T&E cost and schedule reduced





# How does M&S support T&E?



- Can be used to support down selection decisions
- Estimate performance envelope
- Used to develop test scenarios and mission profiles
- Expands the test envelope
  - simulate variety of environmental and operational conditions
  - relies on quality test data to prove the model





# How is T&E relevant?

## M&S and T&E Mutually Supportable

		<b>M&amp;S Applications</b>		
		Pre-test	Test	Post Test
M&S Type	A	Estimate performance envelope. Plan & rehearse data acquisition.	Create loading with simulators and stimulators. Drive instrumentation.	Assess vulnerability Examine alternative environments.
	B	Develop test scenarios and mission profiles.	Scenario driver for command, control, communications and intelligence.	Supplement test results. Examine effects of test limitations on evaluation.
		Predict Model	Observe Test	Apply Model

### M&S Types

**A - Engineering**

**B - Combat**

### **Test Applications**

M&S Type	A	Estimate weak M&S areas. Address M&S assumptions. Obtain missing M&S data.	Developmental Test conducted to fill M&S data voids.	Rerun M&S with <u>actual</u> test data to confirm validity of initial M&S results.
	B	Run M&S using estimated: <ul style="list-style-type: none"><li>- human performance</li><li>- man-in-the-loop</li><li>- doctrine</li><li>- tactics, techniques, and procedures (TTPs)</li></ul>	Operational Test conducted to measure: <ul style="list-style-type: none"><li>- actual performance</li><li>- combat doctrine</li><li>- TTPs</li></ul>	Re-calibrate M&S with <u>actual</u> test data. Re-estimate M&S system performance. Determine ROI to combat unit.
		Pre-test	Test	Post Test



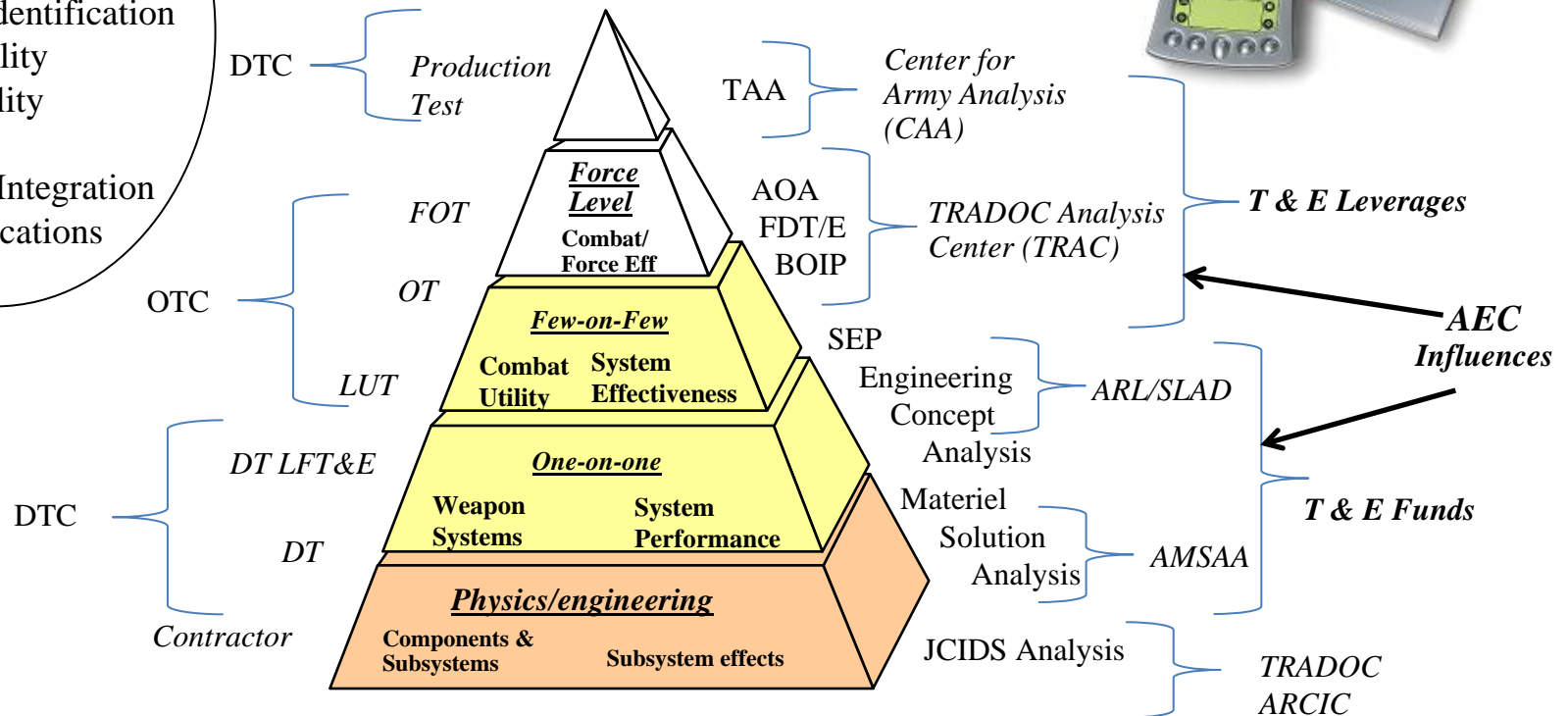


# How is T&E relevant?

## Analysis and Evaluation

Provides decision data for Army leadership

Lethality  
Active Protection  
Delivery Accuracy  
Target Acquisition  
Combat Identification  
Vulnerability  
Survivability  
Mobility  
Software Integration  
Communications







# Synergy of T&E and Requirements



- Ensure system requirements are operationally relevant
- Early development of Concept of Employment/CONOPS critical to all phases of acquisition planning
  - Why do you need it?
  - Where will it be used on the battlefield?
- Well rationalized Critical Operational Issues/Criteria
- Get systems to warfighter faster
  - T&E standards minimize repeat testing
  - find and fix problems early
- Keep test costs down

**Rqmts/User  
Community**

**Test Community**





# Synergy of T&E and Requirements



## Operationally Relevant KPPs

- Mission based
- Not technical parameters
- What is significant capability required that improves current operations?
- What is minimum acceptable including doctrine changes (threshold)?
- What would be ideal (objective)?





# Summary



- T&E is critical to mission success, decision support
- DUSA TE is T&E Enterprise Authority
  - Ensure adequacy of T&E events and infrastructure
  - Strategic direction for T&E Enterprise
  - Advise Senior Leadership for program success
  - As the CBDP T&E Executive, develop T&E Standards for the CBDP
- Well defined, operationally relevant user requirements are critical for ensuring adequate and credible testing and successful systems
  - Requirements are relevant when supported by analysis and aligned to mission needs
  - M&S can support linking all analyses and is reinforced by T&E





# Chemical, Biological, Radiological and Nuclear Defense Information Analysis Center

**Ron Evans**  
**Director**



***CBRNIA***  
*Chemical, Biological, Radiological & Nuclear Defense  
Information Analysis Center*





# Information Analysis Centers (IACs)



**CBRN IAC**  
Chemical, Biological, Radiological & Nuclear Defense  
Information Analysis Center

- Chartered by DoD to generate, collect, analyze and disseminate scientific and technical information
- Provide comprehensive databases, analysis, tools and techniques, and reach-back
- Contractor operated under Defense Technical Information Center (DTIC)
- Support DoD, Other Federal Agencies, Contractors, and State and Local Governments and Emergency Responders

- Chemical, Biological, Radiological and Nuclear Defense
- Survivability/Vulnerability
- Reliability
- Advanced Materials, Manufacturing, and Testing
- Sensors
- Information Assurance
- Weapon Systems Technology
- Data and Analysis Center for Software
- Chemical Propulsion
- Modeling and Simulation



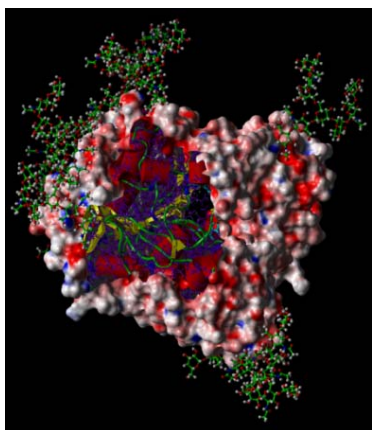


# Background/History



**CBRNIAC**  
Chemical, Biological, Radiological & Nuclear Defense  
Information Analysis Center

- DDR&E and DUSD(S&T)
  - Information Analysis Center (IAC) oversight
- Defense Technical Information Center (DTIC)
  - Implements policies
  - Operational control of ten DoD sponsored IACs
    - Government Owned Contractor Operated (GOCO)
    - Each IAC covers specialized science and technology areas
- CBRNIAC
  - Established as CBIAC in 1986; re-designated CBRNIAC in 2007
  - Broad technical scope covering CBRND and HLS
  - Technical guidance/direction: Executive Steering Committee (ESC) and Scientific Research Council (SRC)



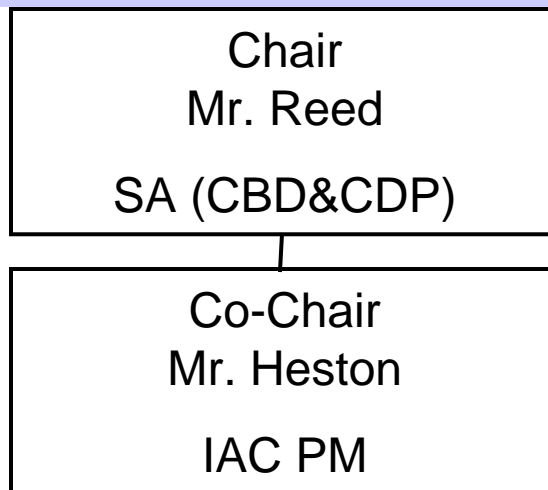




# Executive Steering Committee



**CBRN IAC**  
Chemical, Biological, Radiological & Nuclear Defense  
Information Analysis Center



## Members

- DTRA: Dr. Galloway
- Army: Mr. Decker
- Navy: Mr. Purello
- Joint Staff: COL Barnett
- USAF: Dr. Stotts
- USMC: Dr. Stark
- Medical : Dr. Churilla
- DIA: Mr. McNulty
- JPEO-CBD: BG Scarbrough
- USACBRNS: COL(P) Smith

## Associate Members

OSTP, OMB, USDA, DOE, DOJ, DOS, HHS, DHS, FEMA, EPA, OSD(HD),  
FDA, CIA, OSD (Policy), SO/LIC, TSWG, USCG, USANCA, CDC



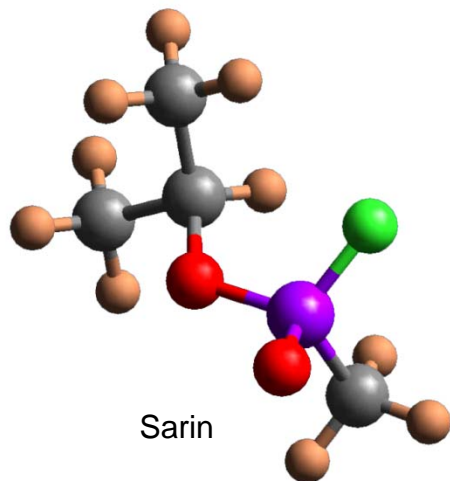


# Technical Scope



**CBRN IAC**  
Chemical, Biological, Radiological & Nuclear Defense  
Information Analysis Center

- Chemical and Physical Properties of CW/CBD Materials
- Toxicology
- Warning and Identification
- Medical Effects and Treatment
- Treaty Verification
- International Technology, Proliferation and Control
- Individual and Collective Protection
- Chemical Identification
- Environmental Fate and Effects
- Decontamination
- NBC Survivability
- Combat Effectiveness
- Smoke and Obscurants



- Demilitarization
- Analysis of Manufacturing Processes for NBC Systems
- Defense Conversion & Dual Use Technology Transfer
- Domestic Preparedness / Homeland Security
- Force Protection
- Counterterrorism
- Counterproliferation
- Toxic Industrial Chemicals/Materials (TICs/TIMs)
- Radiological and Nuclear Defense





# Operations



- Edgewood Area, Aberdeen Proving Ground, MD
- Washington, D.C.
- Jacksonville, NC
- San Antonio, TX
- Natick, MA
- Dugway Proving Ground, UT
- St Robert, MO





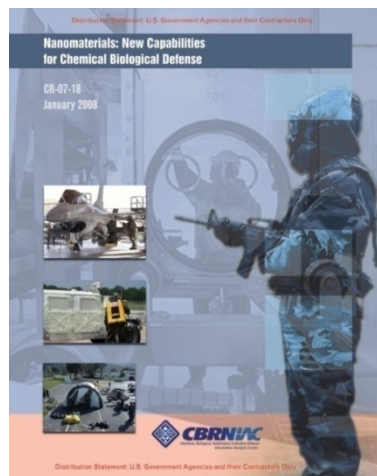


# Core Program Services & Products

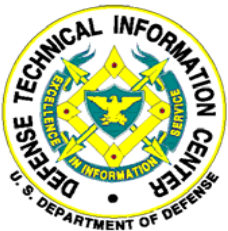


**CBRNIAC**  
Chemical, Biological, Radiological & Nuclear Defense  
Information Analysis Center

- **Inquiries and Analysis (4 Hours Free)**
  - Information
  - Technical
  - Bibliographic
  - Referrals
  - Gateway to CBRNIAC reach-back
- **CBRNIAC Website (<http://www.cbrniac.apgea.army.mil>)**
  - Recently redesigned, user friendly
  - One stop shop: Inquiries, Products, Tech Support, etc.
- **Newsletters/Brochures/Outreach**
- **Products**





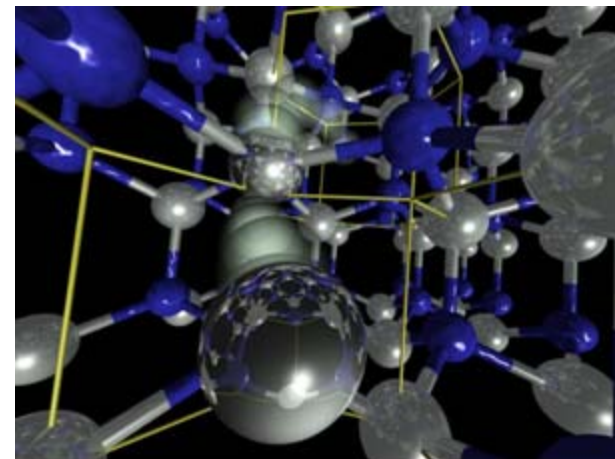


# Information Resources



**CBRNIAC**  
Chemical, Biological, Radiological & Nuclear Defense  
Information Analysis Center

- CBRN Scientific & Technical Analysis & Research Tool
  - Over 161,000 records
- Holdings - over 150,000 items
- Other CBRNIAC Databases and Collections
  - Chemical Biological Materials Effects Database (CBME)
  - BACWORTH
  - Agent Fate and Effects
  - Agent Simulant Knowledge (ASK Database)
  - Chemical Weapons (CW) Treaty Reference Collection
  - Biological Weapons (BW) Treaty Reference Collection
  - Biological Warfare (BW) History
- DTIC Total Electronic Migration System
- Numerous outside data sources
  - STINET
  - RDECOM STILAS
  - DENIX
  - NLM
  - ChemFinder
  - NIST
  - NIOSH
  - DIALOG
  - DOE
  - DPG TIC







# Total Electronic Migration System



**CBRN IAC**  
Chemical, Biological, Radiological & Nuclear Defense  
Information Analysis Center

- Total Electronic Migration System (TEMS) allows registered DTIC users to search the 10 DoD IACs' electronic holdings using any Web browser.
  - Unclassified material accessed through the Internet.
  - TEMS classified accessed via SIPRNET.
- TEMS provides full-text search capabilities.
- TEMS contains:
  - Over 1,209,000 citations
  - Over 304,000 documents
- Access TEMS at <https://tems-iac.dtic.mil>
- Register for access at <https://register.dtic.mil>
- TEMS Contact Information
  - Defense Technical Information Center
  - IAC Program Management Office (DTIC-AI)
  - 8725 John J. Kingman Blvd, Suite 0944
  - Fort Belvoir, VA 22060-6218
  - Phone: 703.767.9120
  - E-mail: [tems@dtic.mil](mailto:tems@dtic.mil)







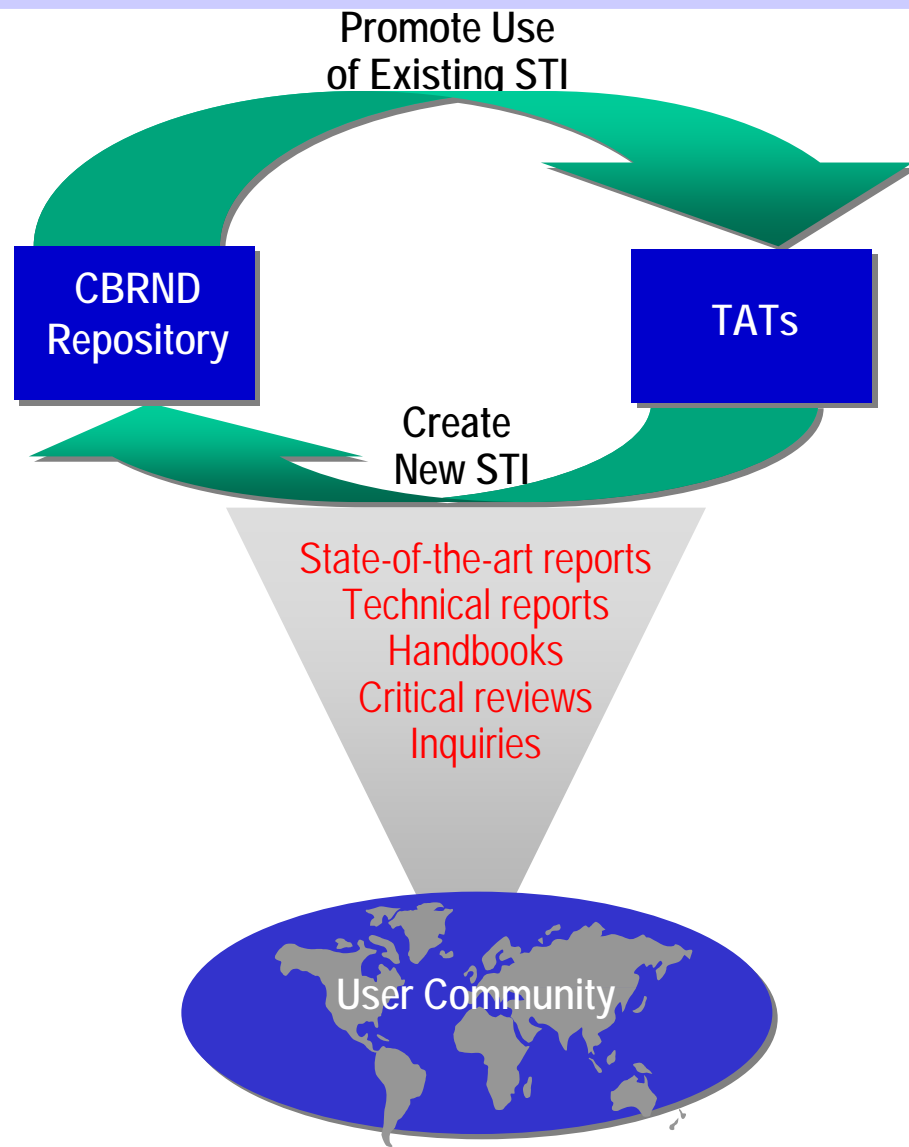
# Technical Area Task Program



**CBRNIAC**  
Chemical, Biological, Radiological & Nuclear Defense  
Information Analysis Center

## Concept

- Provide an ID/IQ mechanism to support client technical requirements beyond basic IAC operations
- Create new scientific and technical information (STI) to meet immediate user requirements
- Incorporate TAT STI into CBRNIAC CBRND repository
- Leverage TAT STI to support broader user needs/ applications







# Summary



**CBRNIAC**  
Chemical, Biological, Radiological & Nuclear Defense  
Information Analysis Center

- CBRNIAC assists DTIC in supporting the community
- CBRNIAC addresses CBRN Defense and Homeland Security issues
- Core Program
  - No Cost Inquiry Support
  - Comprehensive CBRND Repository
  - Newsletters
  - State-of-the-Art Products
  - Gateway to CBRNIAC reach-back
  - “One-Stop Shop” Website
    - <http://www.cbrniac.apgea.army.mil>
- Technical Area Tasks
  - Responsive
  - Easy to Use
- Knowledge Management Capabilities
- CBRNIAC Focuses on Customer Service



**Your “One Stop Shop”  
for CBRND/HLS Support**





**CBRNIAC**  
Chemical, Biological, Radiological & Nuclear Defense  
Information Analysis Center

# Points of Contact

---

- Mr. Ronald L. Evans, Director
  - 410-676-9030
  - [evansrl@battelle.org](mailto:evansrl@battelle.org)
- Dr. Jim King, Deputy Director
  - 410-612-6420
  - [kingj@battelle.org](mailto:kingj@battelle.org)
- Ms. Janice Rhodes, TAT Manager
  - 410-612-6423
  - [rhodesj@battelle.org](mailto:rhodesj@battelle.org)
- Ms. Jeanne Rosser, Technical Inquiry Manager
  - 410-612-6419
  - [rosserj@battelle.org](mailto:rosserj@battelle.org)
- Website
  - <http://www.cbrniac.apgea.army.mil>





***Making the World Safer***



# Chemical & Biological Defense Science & Technology

COL Mike O'Keefe

Distribution Statement A: Approved for Public  
Release; distribution is unlimited





# ***The Mission***



## **DTRA Mission**

**The mission of the Defense Threat Reduction Agency (DTRA) is to safeguard the United States and its allies from weapons of mass destruction (WMD) (chemical, biological, radiological, nuclear and high-yield explosives, or CBRNE) by providing capabilities to reduce, eliminate and counter the threat, and mitigate its effects**

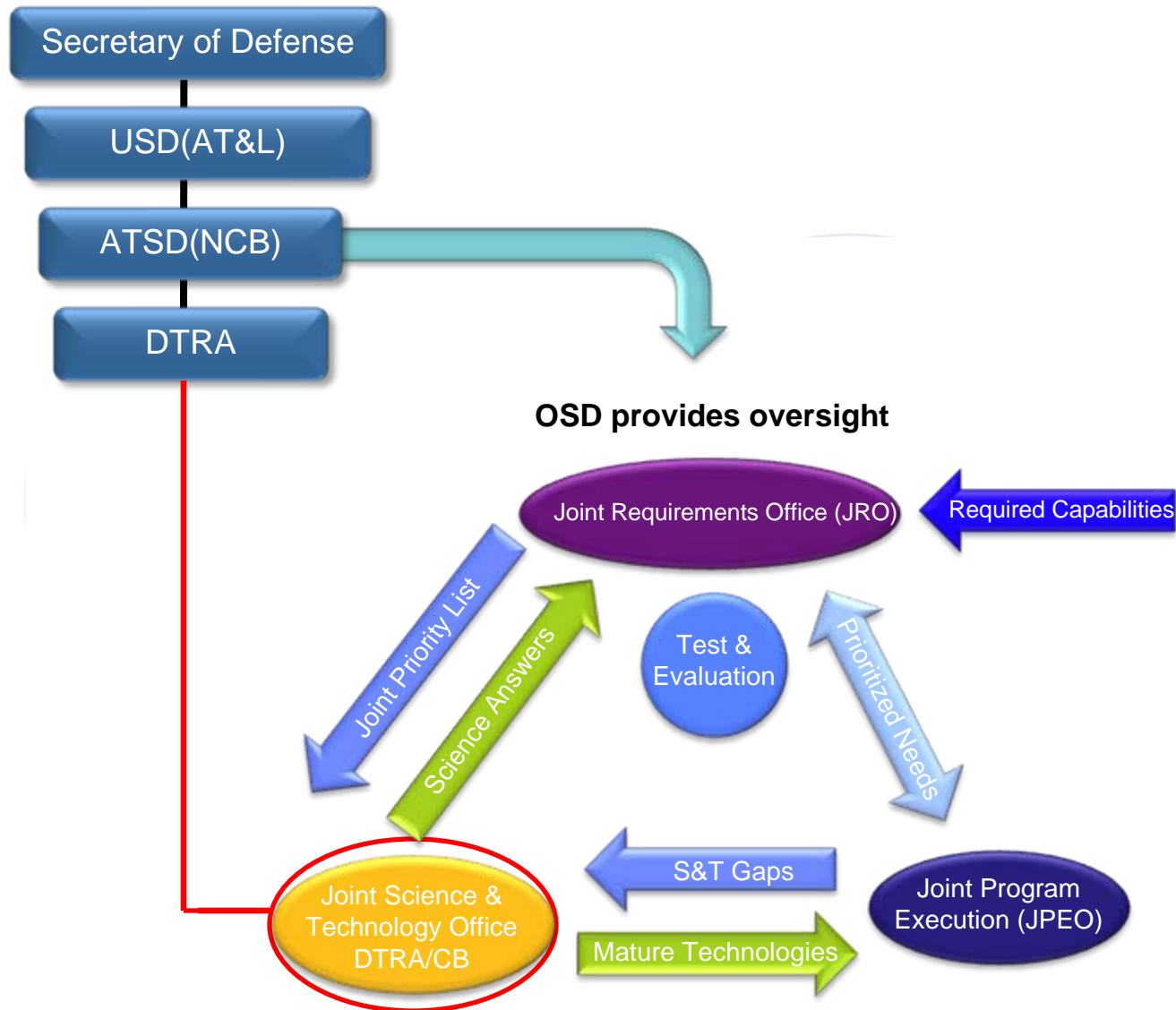
## **Joint Science & Technology Office for Chem Bio Defense**

**Manages and integrates the development, demonstration, and transition of timely and effective chemical and biological defense solutions for the Department of Defense, while serving as the focal point for science and technology expertise**





# DTRA Role in Chem-Bio Defense

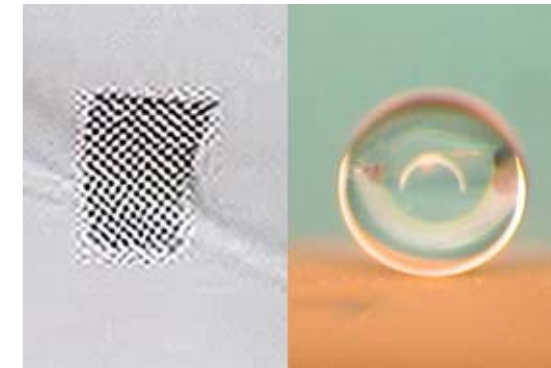
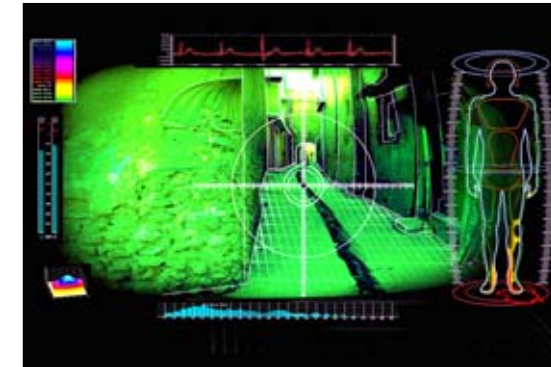
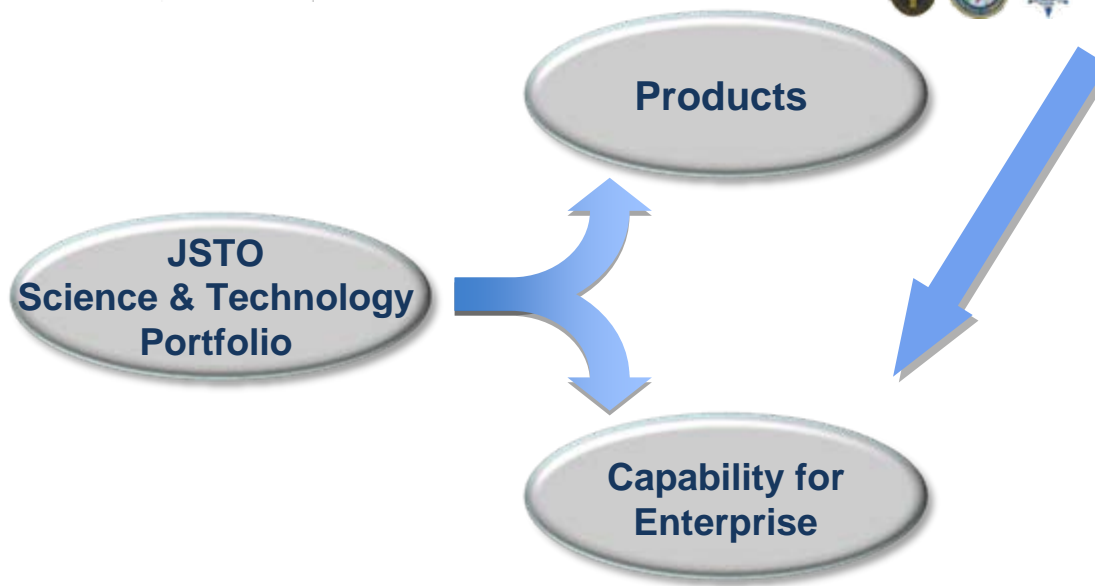




# Guiding S&T Investment



**Investments are targeted using several sources of guidance and requirements**

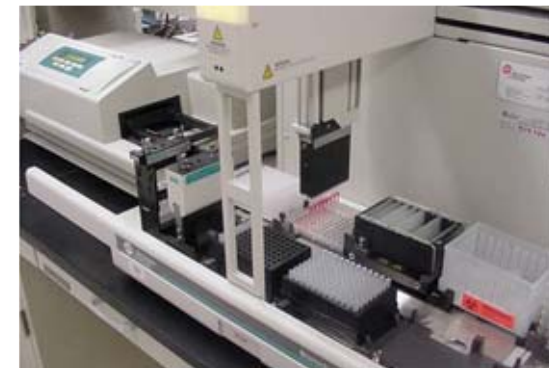
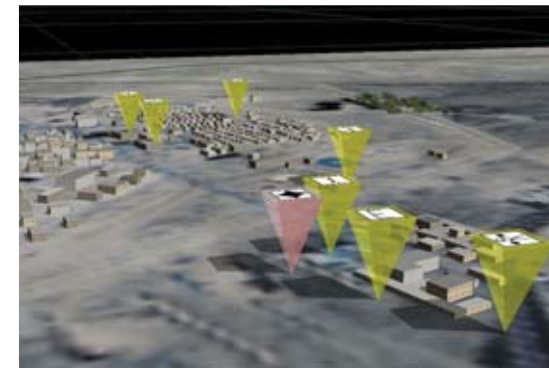
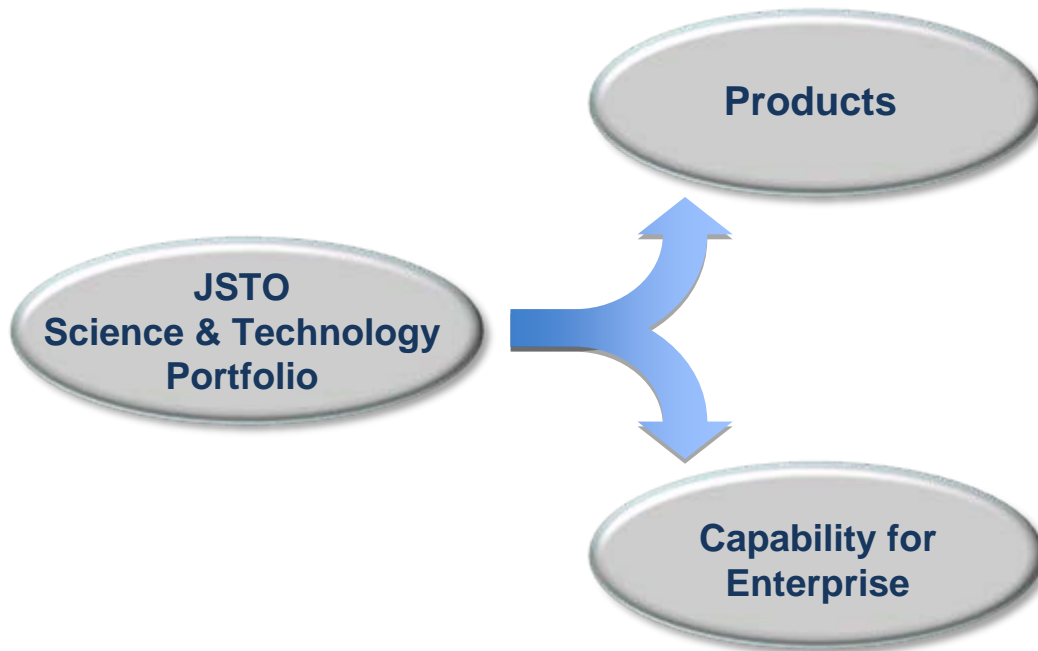




# Understanding the Threat



- Detection and identification
- Early warning
- Pre-symptomatic diagnostics

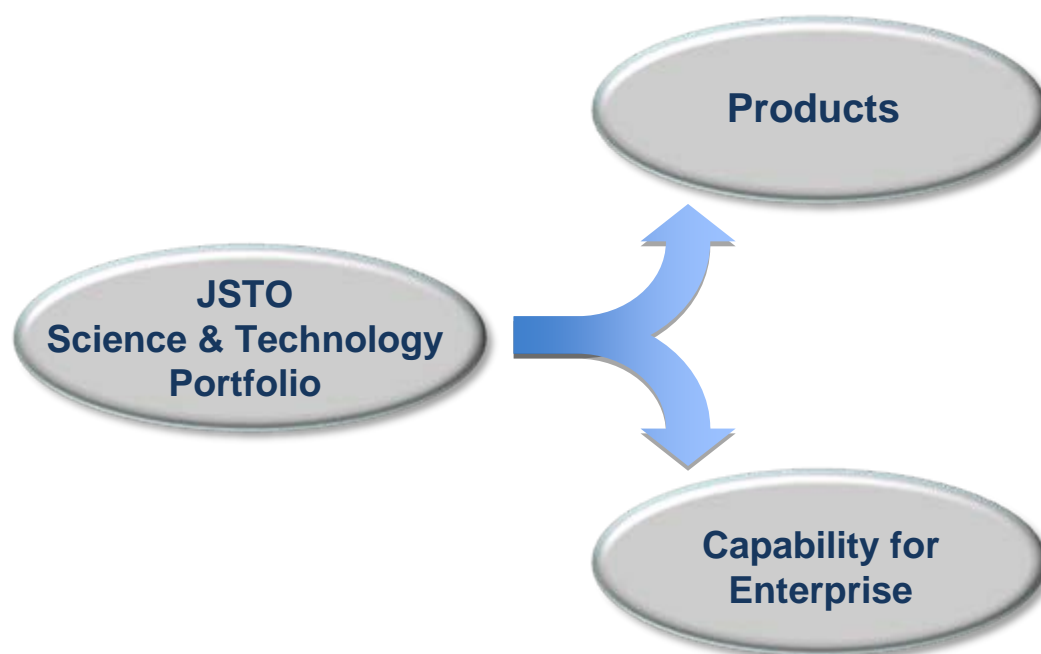




# Protecting Against the Threat



- Individual protection
- Enhanced filtration
- Medical prophylaxis

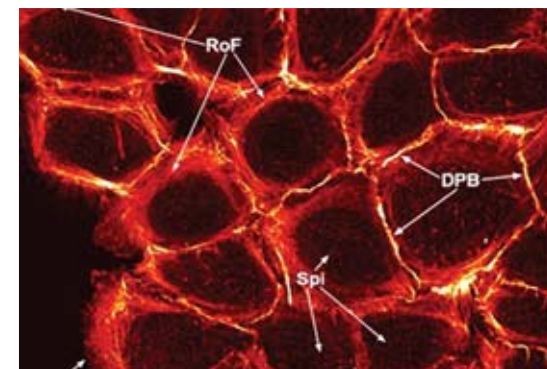
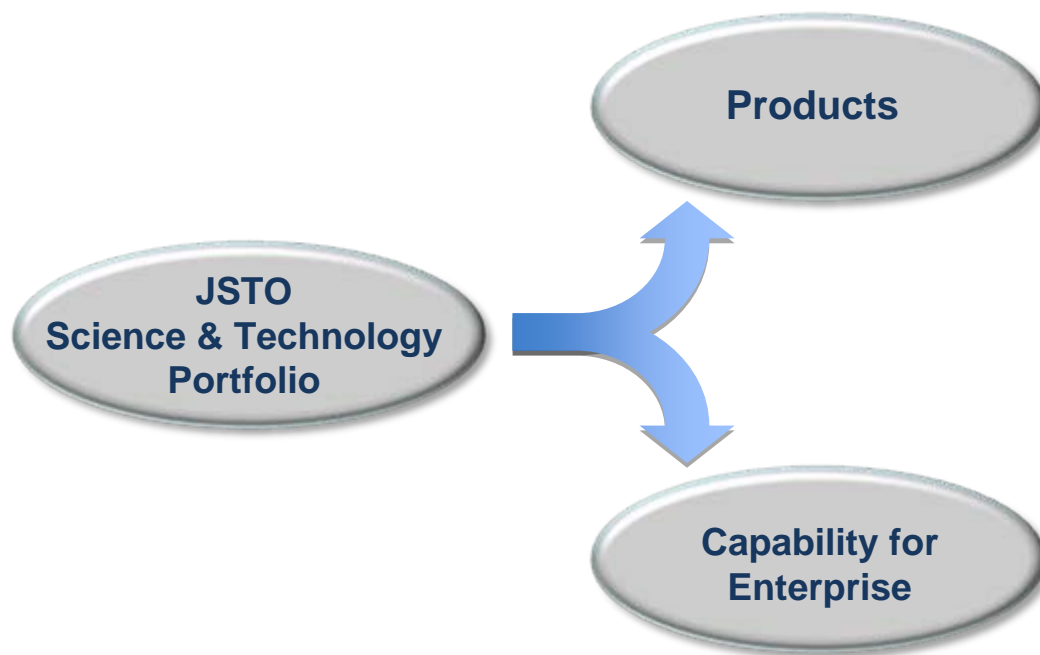




# Minimizing the Threat



- Decontamination
- Therapeutics
- Recovery

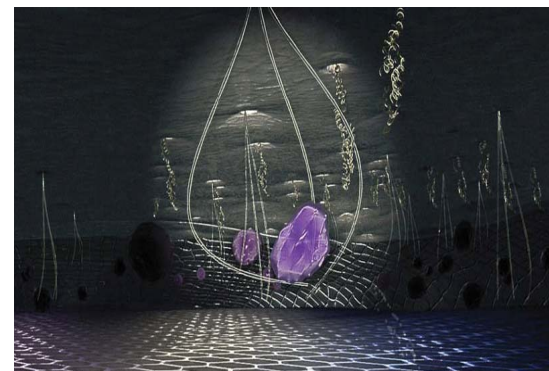
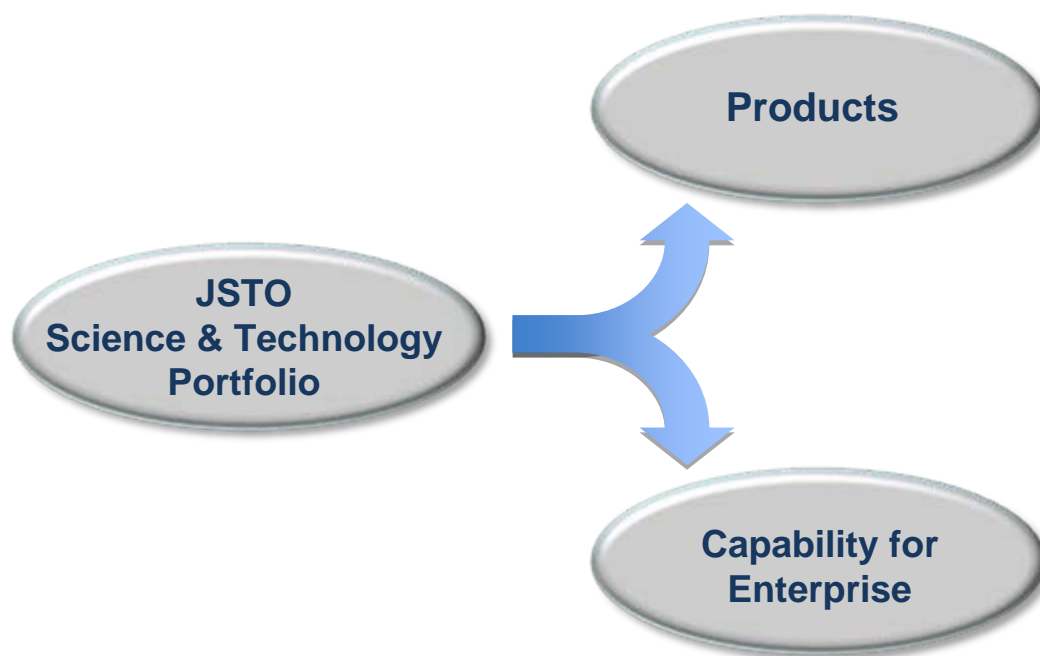






# ***Anticipating Future Threats***

- Exploiting rapid technology advances
- Ensuring S&T capability for the future





# Take Aways



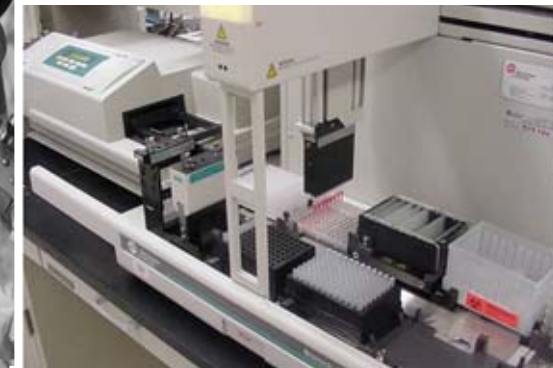
- DTRA counters the entire range of WMD, across the full scope of military operations
- DTRA brings forward the best technology for future capabilities
- DTRA makes warfighter needs foremost



***Meeting the WMD Challenge...  
Making the World Safer***



# Questions ?





This Brief is Classified:  
**UNCLASSIFIED**



# ***Joint Task Force Civil Support***

## ***JCBRN Conference***

***24 June 2009***





UNCLASSIFIED

# *Catastrophic Concerns*







“The scenarios... are so hard for us to contemplate and so emotionally traumatic that it is tempting to push them aside. However now is the time to have this difficult conversation.” Sen Joseph Lieberman(I-Conn)





"In my opinion, the prospects of a future attack against the United States are almost certain. *It's not a matter of if, but when.*"

Former Vice President Dick Cheney



*"It will happen again..."* General McCaffrey





UNCLASSIFIED

# ...A Matter of When







UNCLASSIFIED

# ***USNORTHCOM Mission Statement***

**USNORTHCOM *anticipates* and conducts Homeland Defense and Civil Support operations within the assigned area of responsibility to *defend, protect, and secure* the United States and its interests**







# ***NORTHCOM's Role***

- **Ensure U.S. Homeland is a difficult target**
  - Layered defensive networks of systems, devices, personnel and information.
  - Significant investment in chemical and biological defense, protection and response technologies.
  - World leader CBRNE related science and technology, research and development, and testing and evaluation.







# ***NORTHCOM Capabilities***

- **A robust CBRNE detection and attribution infrastructure.**
  - CBRNE forensics are used to determine the origin of threat materials in both pre and post events.
  - Bio-forensic capability demonstrated in the aftermath of the 9/11 attacks. Maturing science that faces legal examination.
  - Law enforcement employs advanced techniques to detect explosives and drug residue in fingerprints.







# ***ARNORTH Mission Statement***

**USARNORTH conducts Homeland Defense (HLD) and Civil Support (CS) operations, and Theater Security Cooperation (TSC) activities, as the Army Service Component Command (ASCC) to U.S. Northern Command in order to protect the American people and their way of life. On order, USARNORTH commands and controls deployed forces as a Joint Task Force (JTF) or Joint Force Land Component Command (JFLCC).**







UNCLASSIFIED

# JTF-CS Mission

JTF-CS **anticipates, plans and integrates** USNORTHCOM Chemical, Biological, Radiological, Nuclear, and high-yield Explosive (CBRNE) Consequence Management operations and **when directed**, establishes command and control of DoD forces for a CBRNE incident to **assist** local authorities in saving lives, preventing injury, and providing temporary critical life support





# USNORTHCOM Organization Chart

## Geographical Combatant Command



The President



Secretary of Defense

### Relationships

- ..... Coordinating
- COCOM/OPCON
- - Supported/Supporting

U.S. Coast Guard



STANDING JOINT FORCE HEADQUARTERS - NORTH

JOINT TASK FORCE ALASKA



JOINT FORCE HEADQUARTERS NATIONAL CAPITAL REGION



National Guard Bureau



ARNORTH JFLCC



JOINT TASK FORCE CIVIL SUPPORT

AFNORTH JFACC



JOINT TASK FORCE NORTH

MARFORNORTH



DCO



EPLO

FLEET FORCES COMMAND JFMCC



OPCON TACON

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“It is bringing **capability** and **capacity** at the **right time** at the **right place**, not overwhelming the receiving state, but bringing in **something that is sorely needed...the governor is the commander in his or her state.**” “...not too soon, but not a second too long...”

General Victor E. Renuart Jr.  
Commander  
NORAD & USNORTHCOM

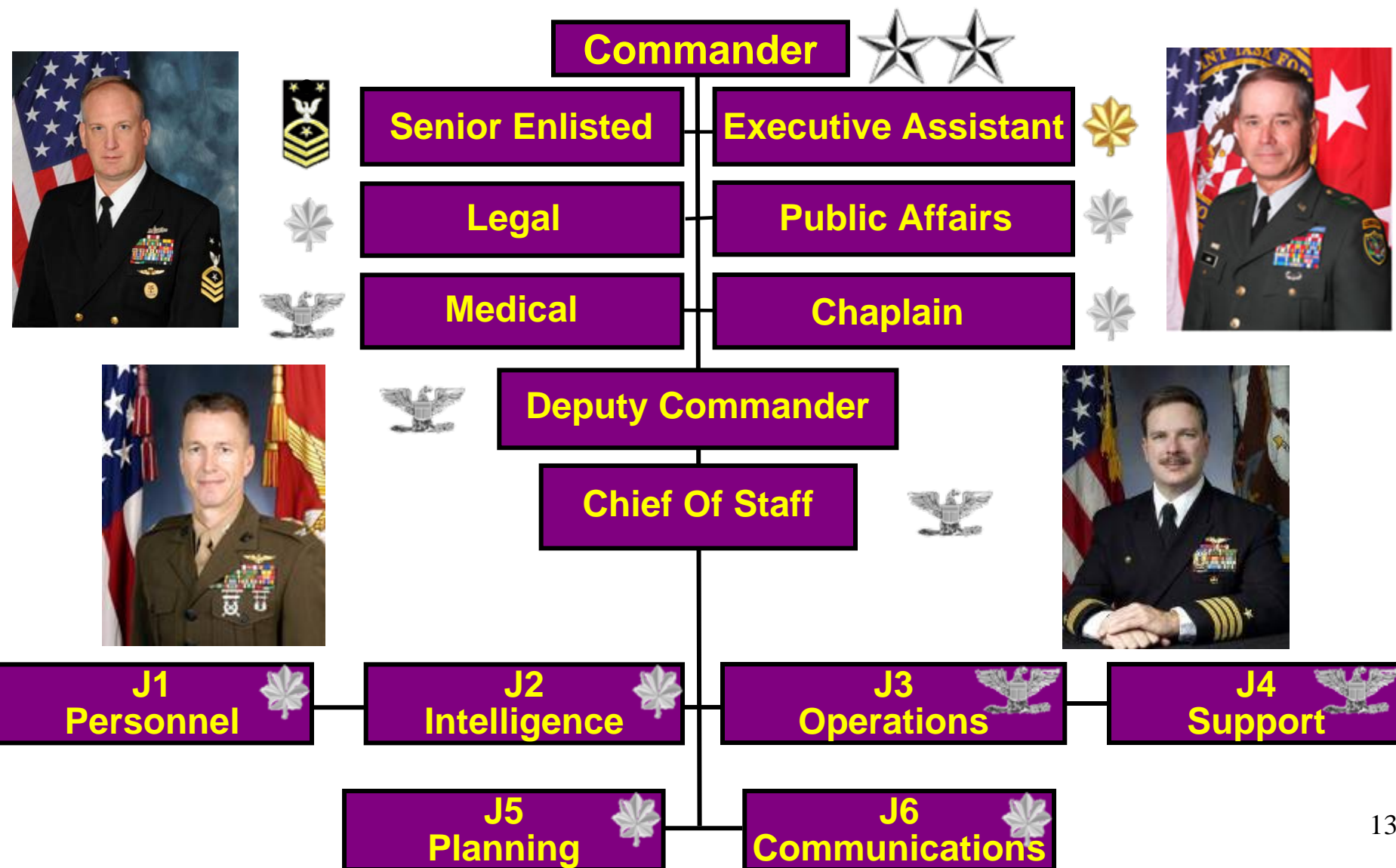




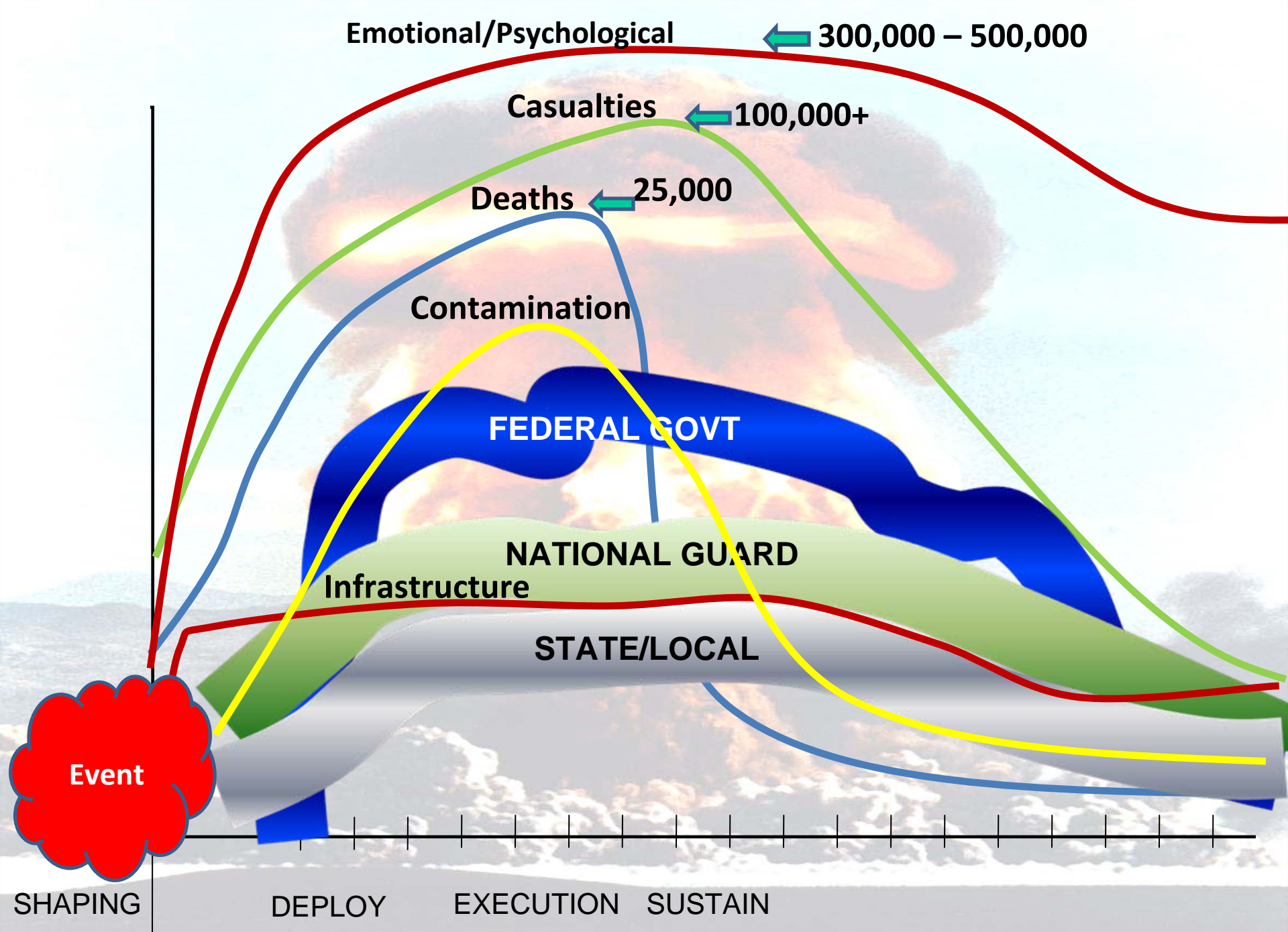


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# JTF-CS Structure











# Area of Responsibility

**JTF-CS provides CBRNE planning, exercise, and response support within the U.S., its territories, and possessions**

## USPACOM

Hawaii

Guam

American Samoa

Commonwealth of  
Northern  
Mariana Islands

Federated States of  
Micronesia, Marshall  
Islands, and Palau

## USNORTHCOM

CONUS and Alaska

Puerto Rico

US Virgin  
Islands

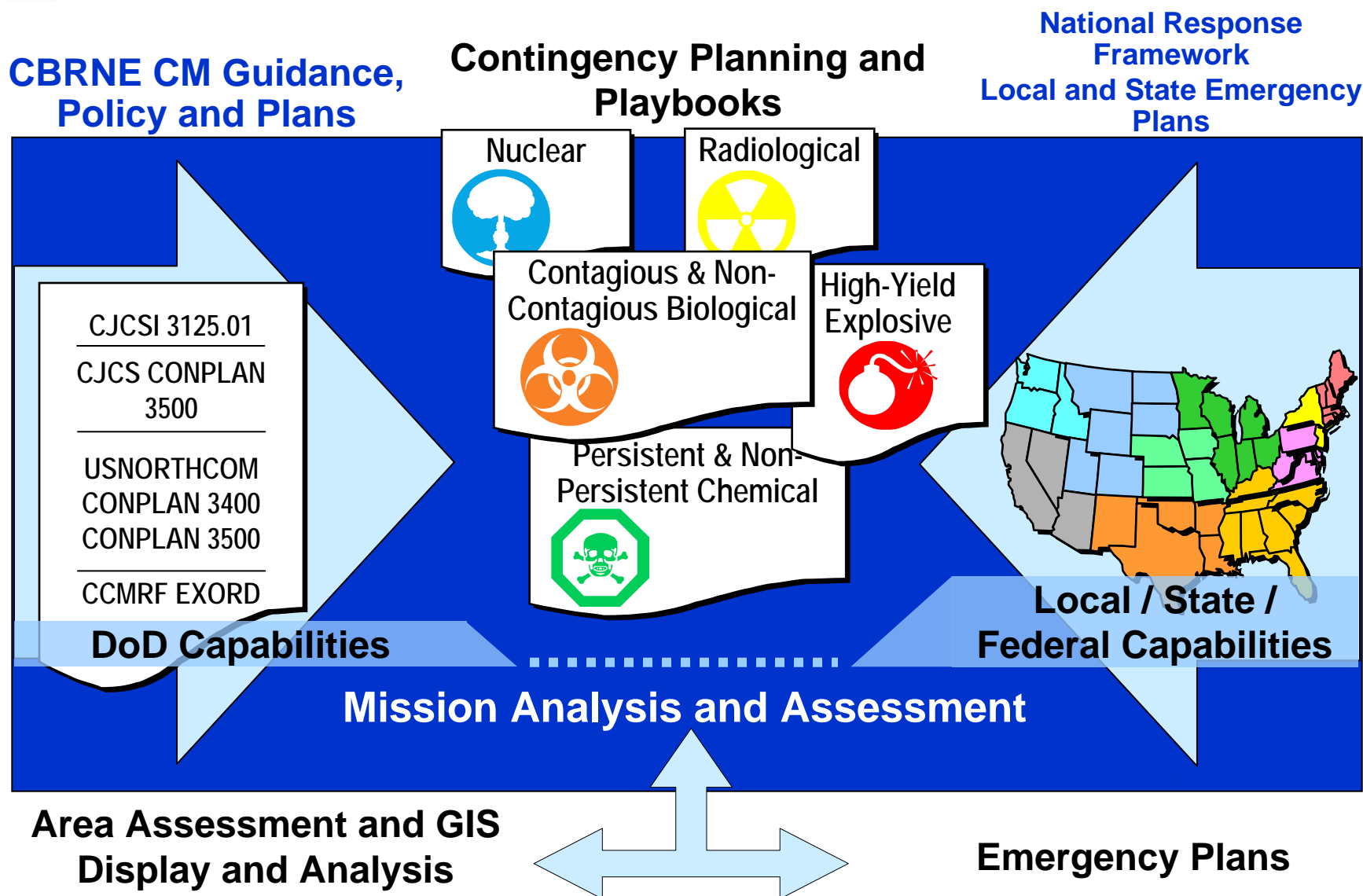


- Big Country
- Lots of POC's
- Diverse/Varied





# Deliberate Planning - Preparedness







“...find the right way to put together **capabilities** of the **federal government** in support of the **capabilities of the state**...”

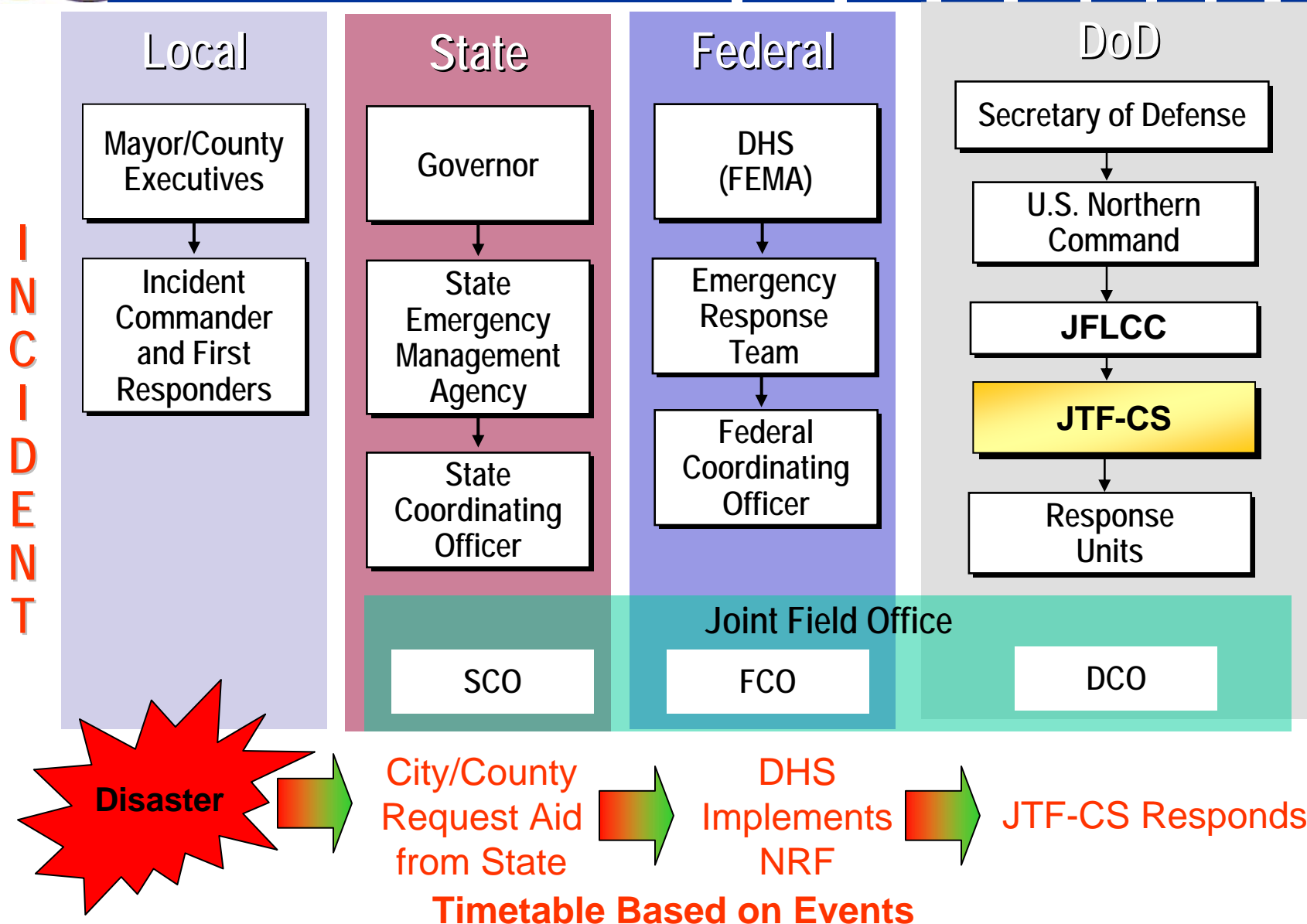
General Victor E. Renuart Jr.  
Commander  
NORAD & USNORTHCOM







# National Incident Management

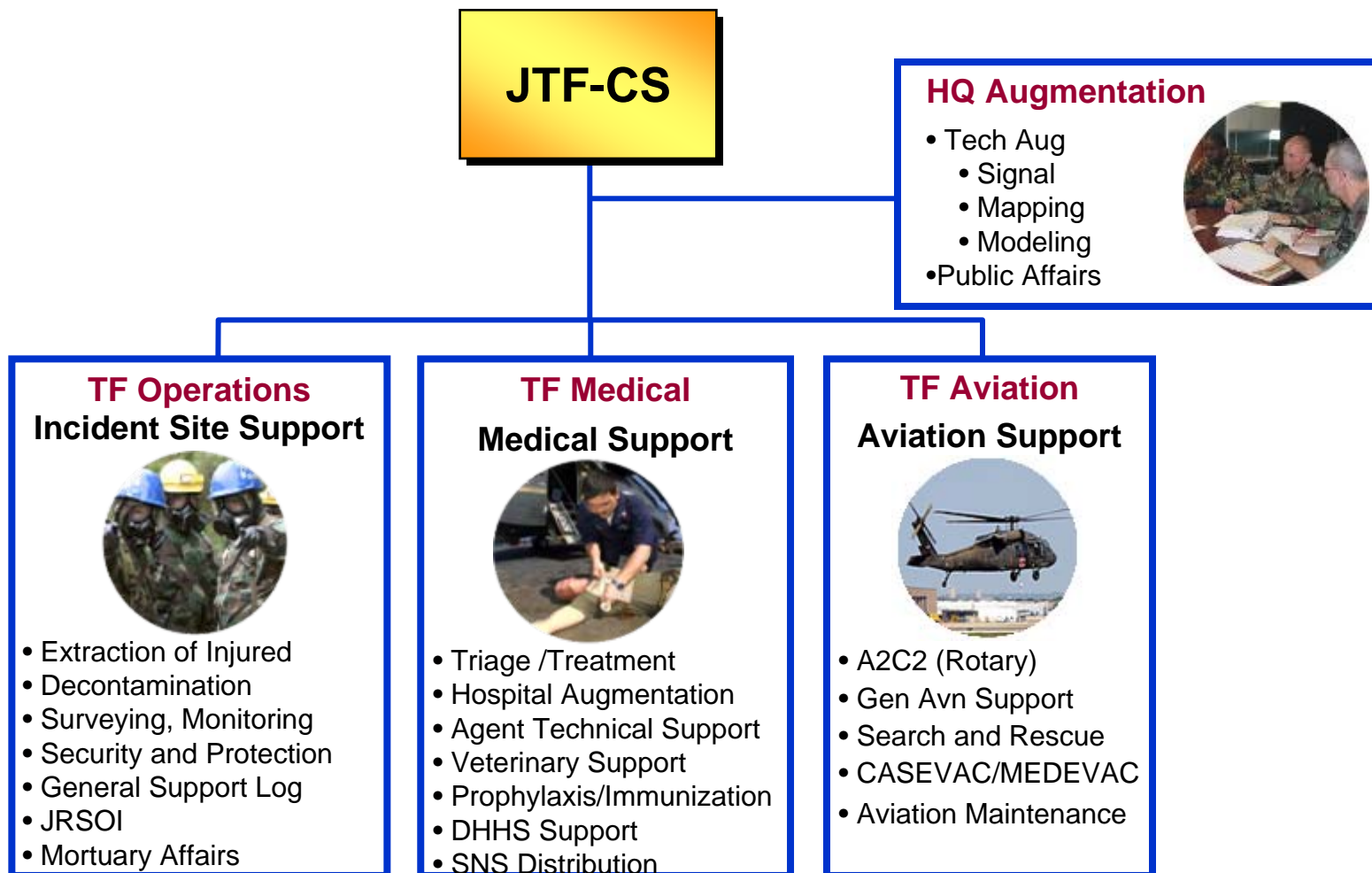






# CBRNE CM Response Force (CCMRF)

JTF-CS provides command and control, and coordination for the following types of tasks and requirements







“...look for ways to continue to **partner** to make the job of the states easier when it comes time to respond within their state...”

General Victor E. Renuart Jr.  
Commander  
NORAD & USNORTHCOM





# Questions?





MANEUVER  
SUPPORT  
CENTER  
FORT  
LEONARD  
WOOD



# Maneuver Support Center & Fort Leonard Wood



"World-Class in All We Do!"

*Building Strong Warriors, Leaders, Families & Forces to Defend Our Nation— One Person at a Time*





# What We Do



***Build Strong Warriors, Leaders,  
Families, and Forces;  
Using the Comprehensive Approach;  
in order to Defend the Nation  
through Full Spectrum Operations  
in a JLIM Environment  
– One Person at a Time***





*Doctor of Medicine*

*Awarded the Medal of Honor*

*Colonel of the 1<sup>st</sup> Volunteer  
Cavalry at San Juan Hill*

*Governor General Cuba*

*US Ambassador to Argentina*

*Author*

*CSA 1910 – 1914*

*- Forerunner for ROTC*

*- Transformed the Army for WWI*

*CG 89<sup>th</sup> Infantry Division*

*Governor General Philippines*

***An expert, agile, adaptive, full spectrum scholar-Warrior and visionary leader***





# TRADOC CG Guidance (10 Mar 09)



## FOCUS:

- Win the Current Fight
- Preserve the All-Volunteer Force = Predictability

## PRIORITIES:

1. Leader Development
  - Training
  - Education
  - Experience
2. Initial Military Training
3. Support ARFORGEN
4. Capabilities Integration

## ADDITIONAL GUIDANCE:

Break down “bubbles” and reduce “redundancy” in our processes

Identify impediments -- reduce/eliminate them

Army Force Generation (ARFORGEN) model for “readiness”-- central driver of all we do

Owe Chief of Staff of the Army the best Army possible at 547.4K with resources provided

It's all about delivering results and Commander dialogue – Commander centric organization

Lead up and laterally

Encourage professional reading, e.g.

Post American World, Fareed Zakaria

America Alone, Mark Steyn

Outliers, Malcolm Gladwell

Talent is Never Enough, John Maxwell

We can be our own worst enemy

*“So in the Libyan fable it is told  
That once an eagle, stricken with a dart,  
Said, when he saw the fashion of the shaft,  
‘With our own feathers, not by others’ hands,  
Are we now smitten.’”*

*-Aeschylus Once an Eagle*



**Mission:** The Maneuver Support Center, enabled by a world-class garrison at Fort Leonard Wood, creates Warriors and develops Leaders and capabilities that assure the mobility, freedom of action, and protection of the forces they support.

**Vision:** World-Class in All We Do!



## Priorities

- Build Strong People (Military, Civilian, and Families) – Mind, Body, Spirit, Heart
- Develop Strong, Agile, Adaptive Leaders
  - Training
  - Education
  - Experience
- Train Strong, Expert Warriors
- Support ARFORGEN and Win the Current Fight
- Develop & Integrate Capabilities

**ENGAGE!**





# Fort Leonard Wood Region



## Pulaski County

- Maneuver Support Center
- UM Tech Park at Fort Leonard Wood
- 3<sup>rd</sup> fastest growing rural county in MO

*Rolla – among the 100 Best Small Towns in America*

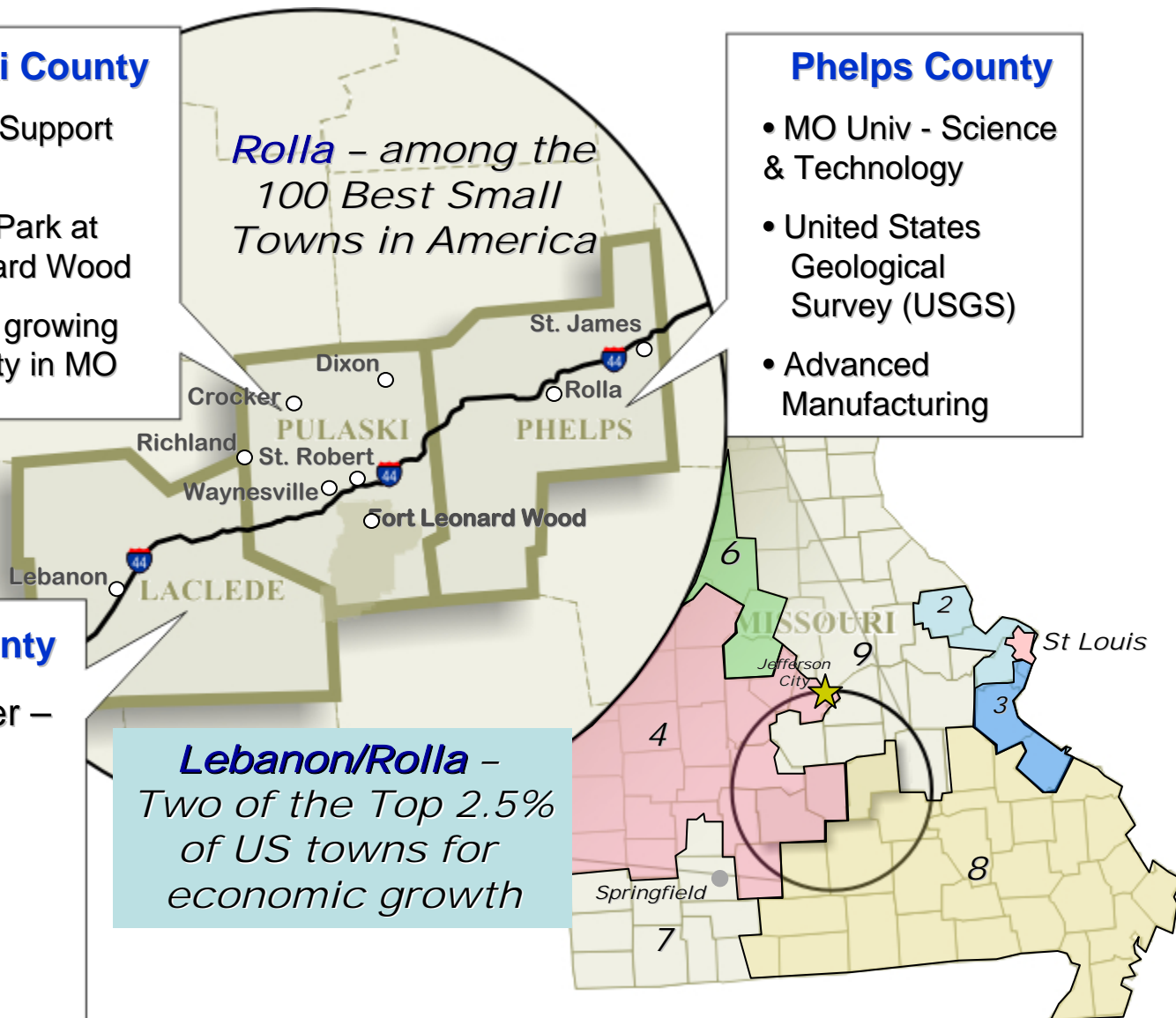
## Phelps County

- MO Univ - Science & Technology
- United States Geological Survey (USGS)
- Advanced Manufacturing

## Laclede County

- Industry Cluster – Recreational Watercraft
- Advanced Manufacturing

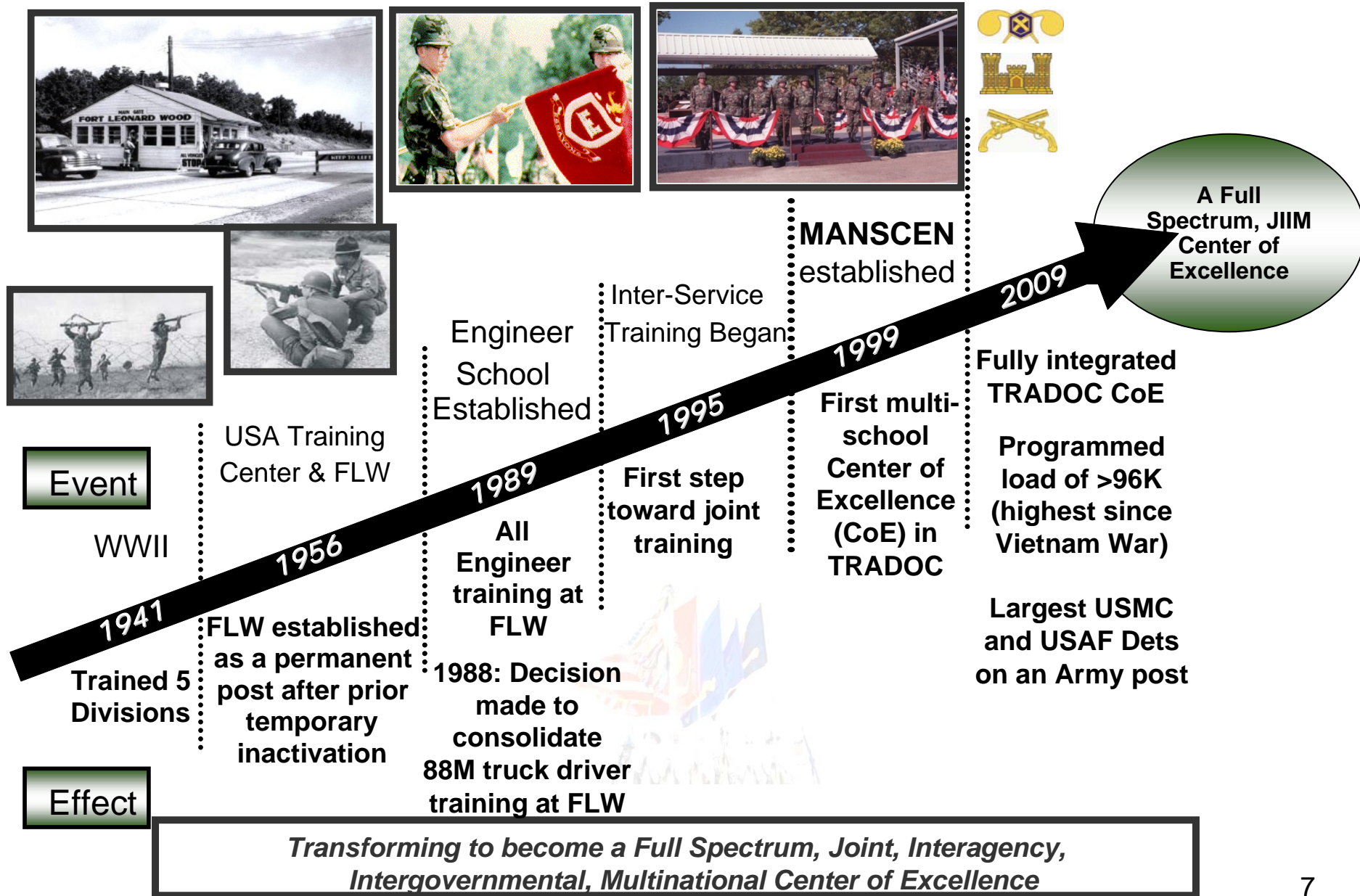
*Lebanon/Rolla – Two of the Top 2.5% of US towns for economic growth*



**Total Population : 122,000 (50mi radius)**



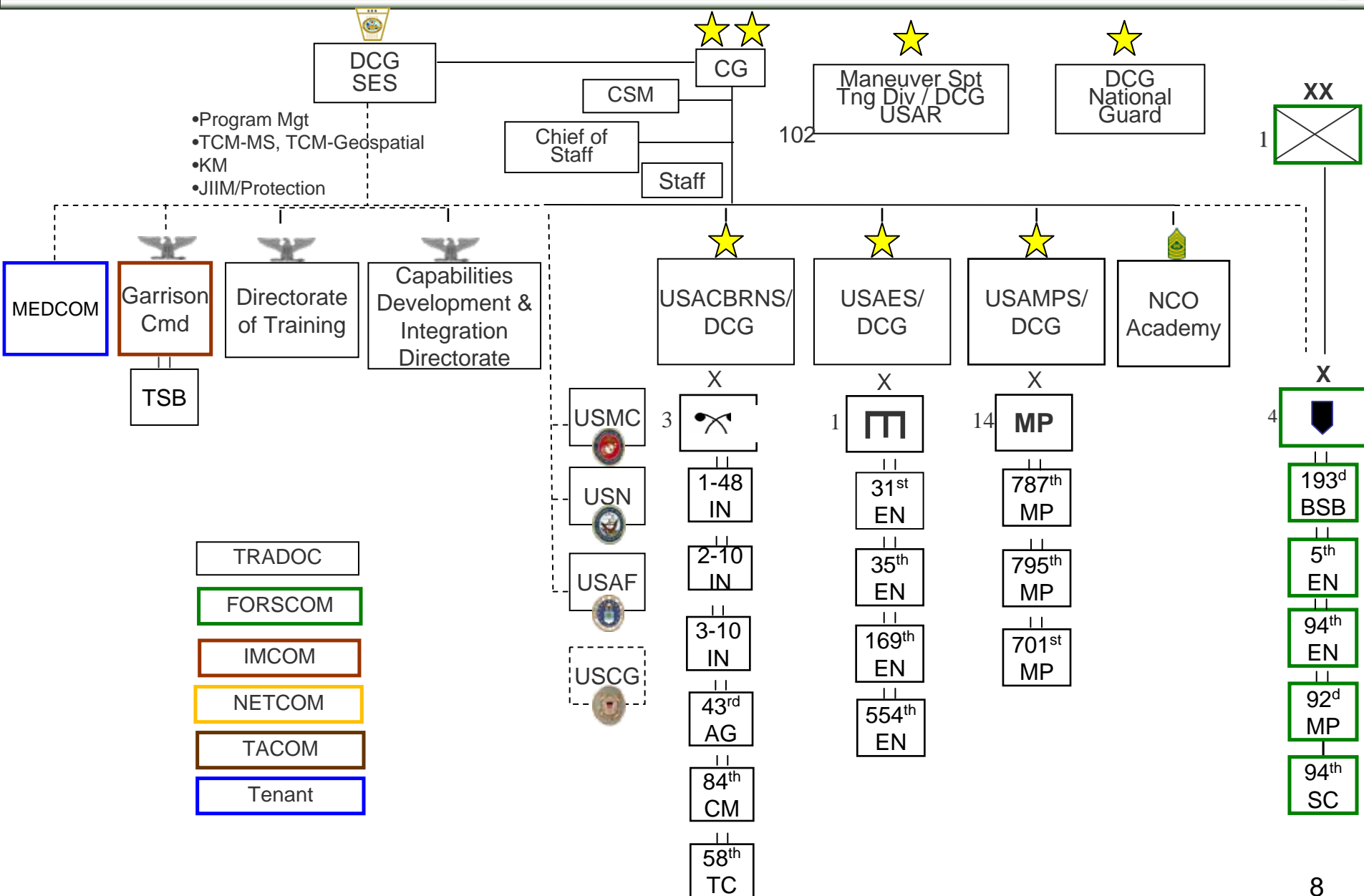
# FLW: Past, Present and Future







# Maneuver Support Center & FLW







# The Post & Its Supported Population

**>\$213M  
FY08  
MILCON**

**>\$93M  
FY09  
MILCON**

**We need \$767M to support our growth**

- Training barracks
- FORSCOM construction
- Single Soldier housing
- Recreational facilities

**Estimated \$2.1B annual economic impact**

## FLW Supported Population:

6,700 Military Permanent Party  
13,700 Servicemembers in Training  
~15,900 Active Duty Family Members  
3,300 DA Civilians  
5,000 Other Civilians  
~22,600 Retirees  
~34,000 Retirees' Family Members  
**TOTAL of ~101,200**

*61,400 Acres (96 square miles)  
>13.7M Square Footage (facilities)*

**An Enduring Army Installation**





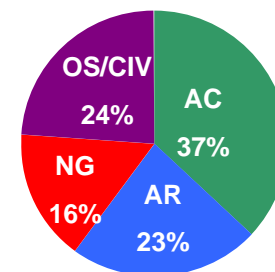
# FY09 Training Projections



<u>Course</u>	<u>Programmed</u>	
Basic Combat Training	13,500	} 63%
Advanced Indiv Training	32,617	
One Station Unit Training	14,324	
Basic Officer Leader Course	1,580	
Captains Career Course	1,216	
NCO Education System	4,050	
Warrant Officer	409	
Functional	12,354	
Inter-Service	8,137	
Additional Skill Identifier	2,081	
Other	6,346	
<b>Total</b>	<b>96,614</b>	



Training Composition



AC: Active Component  
 AR: Army Reserve  
 NG: National Guard  
 OS/CIV: Other Services & Civilians



**19 occupational specialties and 66 highly technical, cutting edge functional courses**





# Training & Education Highlights



## Chemical, Biological, Radiological and Nuclear



- CBRN Defense training in a toxic agent environment
  - Army, Joint, Allied students
  - Deployable unit and Homeland Security
  - Only DoD certified location
- Emergency Responder: CBRN response, Weapons of Mass Destruction, Civil Support Teams, HAZMAT certification
- Sensitive Site Assessment/Exploitation

## Engineer



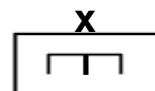
- Counter Explosive Hazard Center:
  - IED-Defeat Train the Trainer
  - Explosive Ordnance Clearance Agent
  - Mine Dog Detachment
  - Search Village
- Joint, Interagency, and Multinational training
- Partnerships with academia

## Military Police



- Evasive Driving: Training DoD and Interagency
- Special Reaction Teams, High Risk Personnel Security, Anti-terrorism, Protective Services, CID
- Army Non-lethal capabilities and development EA

## Leader Development & Education



- Developing leaders for these functional & multi-functional brigades- ready for full spectrum ops
- Pre-Command Course (PCC) for Maneuver Enhancement Brigade, Brigade Special Troops Battalion, CM, EN and MP
- Consolidated NCO Academy – largest in Army

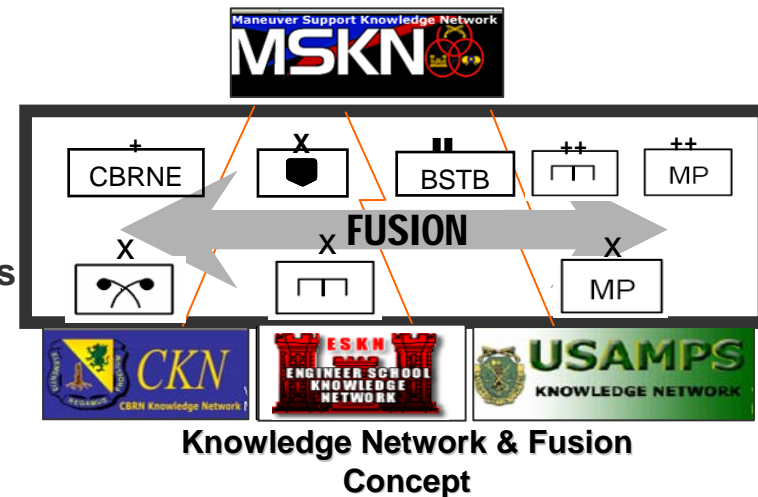




# Supporting the War



- **IED-Defeat rapid transition** and capabilities
- Providing **Knowledge Management , Fusion, Warfighter Forums** → **Real-time reach-back** and support
- **Integrating Lessons Learned across Doctrine, Organization, Training, Materiel, Leadership & Education, Personnel, Facilities (DOTMLPF)** → Leveraging our on-site FORSCOM units for observations and lessons learned
- Supported functional brigades with **269 Mobile Training Teams**
- Supporting Maneuver Enhancement Brigade staffs with exercises and support to **Battle Command Training Program**
- **Providing pre-deployment and post-deployment (reset) support** to our resident FORSCOM units



*Critical Capabilities for the Current Fight*





# Transform: Capabilities Development



## MANSCEN Top Ten Capabilities Development Priorities

1. Explosive/Toxic Hazard and Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Defeat  
Including the following:
  - *Improvised Explosives Device Defeat (IED-D)*
  - *Elimination of Weapons of Mass Destruction*
2. Maneuver Support Concepts, Organizations and Systems  
Including the following:
  - *Military Working Dogs,*
  - *Maneuver Enhancement Brigades (MEB)*
  - *Brigade Special Troops Battalions (BSTB)*
  - *CBRNE Operational Headquarters – 20<sup>th</sup> Support Command (CBRNE)*
3. *Protection*
4. *Consequence Management*
5. Stability Operations, Infrastructure Development and Nation Assistance (including Base Camps)
6. Detainee Operations
7. *Non-Lethal Capabilities*
8. Joint Functional Capabilities (JFC)
9. Geospatial
10. Future Mobility and Support Systems (including *Future Combat Systems Unmanned Ground Vehicles*)

\*Lead for the *Army or Training & Doctrine Command*

***Mission critical capabilities & prioritized efforts to support the current and future fight***





# Taking Care of Our People



- Warrior Transition Unit (~ 160 Wounded Warriors)
- Renovating and Building new Trainee Barracks
- Building New “Townhouse” Single Soldier “Homes”
- Increased attention to Residential Communities Initiative
- Continuous Improvement in MWR and QoL Programs
- Customer Management Service (Leader, Family, Servicemember, Civilian, Retiree views on Importance/Performance)
- General Leonard Wood Army Community Hospital “Access to Care” initiative
- Truman Education Center (6<sup>th</sup> largest degree granting program in state)
- Increased focus on recruiting talented personnel for MANSCEN & FLW positions
- Robust Army Family and Community Covenant Program
  - Most Community Covenants in the Army (5)
- Award Winning AUSA Chapter

*People are our Centerpiece*







# Engaging Our Community



## Supporting & Sustaining our All Volunteer Force Through Outreach

- Engaging local high schools and colleges
- Graduation ceremonies with Families
- Supporting all Total Army Involvement and Recruiting missions
- Educator Recruiting visits
- ~200 weekly interactions with Families through our web page
- Every FLW person is an “ambassador” for our story

## Comprehensive Approach: Coordinating, Collaborating, & Cooperating

- Whole of government approach
- Whole of FLW approach
- Regularly engaging with Congressional leaders
- Quarterly visits with Joint, Other Service and Army staff
- Partnering with academia (e.g., Mizzou, MIT, Fletcher), think tanks (e.g., RAND), and other institutions (e.g., NPS, DLI) to increase our capabilities
- Numerous Community Events/Support

## Effects-Based Information Engagement

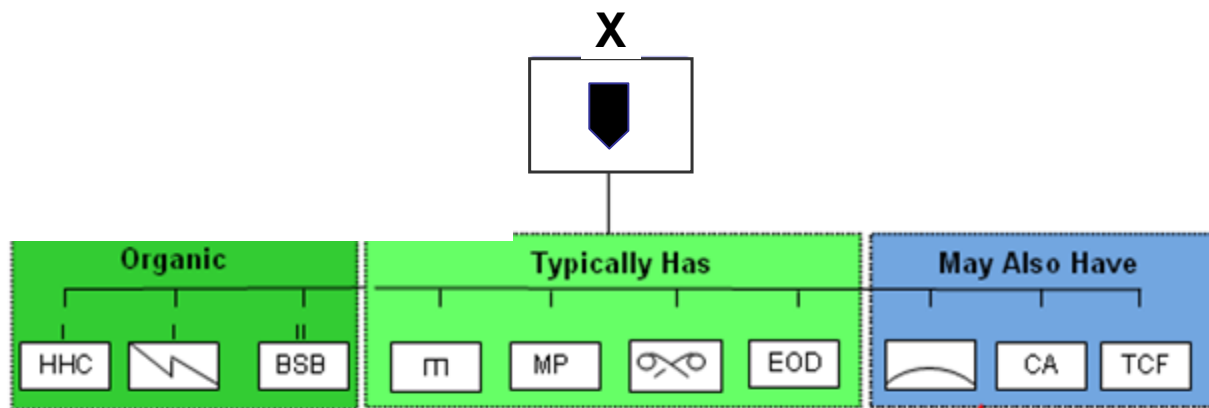
- Energized our STRATCOM cell to tell our story more effectively
- St. Louis Post Dispatch “Reporting for Duty Series”
- PBS, Military Channel, and History Channel coverage
- Award winning post newspaper

***We engage our global community to tell our story and gain support***



# Maneuver Enhancement Brigade

**MEB Mission:** To conduct maneuver support operations, support area operations, consequence management operations, and stability operations for the supported force



14 MEBs in the force today  
(2/10/2 Active/NG/Reserve)

23 MEBs in the force by FY13  
(4/16/3 Active/NG/Reserve)

One of the five modular support brigades

*A unique multi-functional unit to support Maneuver & Joint Forces commanders*



# Inter-Service and JIIM Training

- **Significant Inter-Service presence**  
Average daily Inter-Service population:
  - Perm Party: 490 (70/100/320, USN/USAF/USMC)
  - Students: 1,700 (250/350/1100, USN/USAF/ USMC)
- **Majority of Inter-Service courses have common standards** established through Inter-Service Training Review Organization (ITRO) agreements (AR 351-9)
- **2 Joint Courses:**
  - JCBRN Senior Leader Course
  - Joint Engineer Operations Course
- **Training Interagency and Intergovernmental Personnel in Functional and Leader Courses**
- **International Student Detachment**
- **Increased Multinational training**



*Vision: Increase opportunities and capacity for Inter-Service and JIIM Training*





# ***“Where the Puck Is Going”***



- ***Taking People and Turning Them Into Better People for the Army, Nation, and World***
  - *Mind – Body – Heart– Spirit*
  - *Comprehensive Soldier Fitness*

} And when they take off the uniforms --  
Veterans... Leaders for a Lifetime!
- ***An Adaptive Institution, Fueling Change for Our Army & its Leaders Using 3 Mechanisms:***
  - ***Developing Agile and Adaptive Leaders:***
    - *Teaching Leaders How to Think vs What to Think*
    - *Improving Interagency Programs*
  - ***Forging a Comprehensive Approach to Operations:***
    - *“Whole of Government” / “Whole of MANSCEN/FLW” approach*
    - *Focus on Coordination, Collaboration, and Cooperation (3Cs)*
  - ***Fostering a Culture of Engagement:***
    - *Competent, Confident Creative Communicators*
    - *Focus on Strategic Communication and Information Engagement*
    - *Partnerships with and outreach to Congress, academia, business, and think tanks*

***Building Strong Warriors, Leaders, Families and Forces; Using the Comprehensive Approach; in order to  
Defend the Nation through Full Spectrum Operations in a JIIM Environment – One Person at a Time***



MANEUVER  
SUPPORT  
CENTER  
FORT  
LEONARD  
WOOD



# Maneuver Support Center & Fort Leonard Wood



"World-Class in All We Do!"

*Building Strong Warriors, Leaders, Families & Forces to Defend Our Nation— One Person at a Time*





# DoD Strategic Counter Weapons of Mass Destruction (CWMD) Priorities

POLICY

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**Mr. Timothy X. Morgan**  
**Chief of Staff**  
**Global Security Affairs**

*JCBRN Conference*  
*June 24, 2009*

**Cleared For Open Publication**  
**June 18, 2009**  
**09-S-2230**





POLICY

UNCLASSIFIED

# WMD Security Challenge

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“In a strange turn of history, the threat of global nuclear war has gone down, but the risk of a nuclear attack has gone up.”

-President Obama  
April 2009





POLICY

UNCLASSIFIED

# DoD's Four Strategic CWMD Priorities

---

- ☐ Increase barriers to WMD proliferation and use
- ☐ Improve ability to identify and mitigate emergent WMD threats
- ☐ Develop layered, integrated WMD defense
- ☐ Manage WMD threats emanating from failing, fragile states/ungoverned territories





POLICY

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# DoD Strategic Priorities in CWMD

---

- ❑ **Increase barriers to WMD proliferation and use**
  - Establish climate unfriendly to WMD (non-proliferation treaties, agreements, and professional codes of conduct)
  - Reduce availability of weapons, materials, and delivery systems
  - Inhibit/reduce/reverse proliferation where it occurs; break proliferation networks
  - Detect and intercept the movement of WMD, missiles, and related materials





POLICY

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# DoD Strategic Priorities in CWMD (cont'd)

---

- ☐ **Improve ability to identify and mitigate emergent WMD threats**
  - Detect, strike, and counter emerging threats
  - Deter escalation and use
  - Defeat emerging WMD threats





POLICY

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# DoD Strategic Priorities in CWMD (cont'd)

---

## ☐ Developed layered, integrated WMD defense

- Deny adversaries the benefits they seek through threatened possession and use of WMD
- Prepare the homeland to defense against, respond to biological, chemical, or nuclear attacks
- Detect and intercept threats before they reach the homeland
- Respond and mitigate the effects of WMD attacks





POLICY

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# DoD Strategic Priorities in CWMD (cont'd)

---

- ❑ **Manage WMD threats emanating from failing, fragile states/ungoverned territories**
  - Prevent establishment of WMD-safe havens in ungoverned areas
  - Ensure WMD and materials are under responsible control
  - Prevent loss or transfer of WMD and materials
  - Respond to instability and/or loss of control in a WMD-armed state





UNCLASSIFIED

# Global WMD Contingencies

## POLICY

- ❑ **WMD crises can easily become large scale, complex, global WMD contingencies**
  - Large scale domestic attack with WMD
  - Collapse of a WMD-armed state – loss, transfer of WMD
  - Multiple, simultaneous terrorist attacks using chemical, biological, nuclear weapons
- ❑ **WMD use or loss of control will quickly involve a global response. It will:**
  - Require whole government solutions involving NGOs, corporations, etc
  - Require global and regional planning for DoD – emphasizing response options for attacks that defy conventional retaliatory options
  - Demand synchronization across AORs, within the DoD and within the interagency
  - Require sophisticated, regularly exercised capabilities in every phase of operational planning
  - Demand more military and domestic specialized response capabilities than currently exist – result in multiple geographic and mission demands on the same units
  - Require the USG to more effectively harness the resources of the private sector





POLICY

UNCLASSIFIED

# Way Ahead

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- ☐ **Addressing CWMD in DoD Quadrennial Defense Review**
- ☐ **Developing plans to implement Presidential and DoD priorities**
- ☐ **Engaging interagency and international community**



# Joint Capabilities to Combat Weapons of Mass Destruction

*Joint CBRN Defense Conference & Exhibit*

*Fort Leonard Wood, Missouri*

*June 25<sup>th</sup>, 2009*



Presented by:

Ms. Dee Dodson Morris

Chief of Staff, Joint Requirements Office for CBRN Defense

Directorate for Force Structure, Resources and Assessment (J-8), The Joint Staff

[dee.d.morris@js.pentagon.mil](mailto:dee.d.morris@js.pentagon.mil)



- **JRO's Role, Organization and Responsibilities**
- **CBRND Defense Operational Concept**
- **CBRND Core Capability Areas**
- **Modernization Emphasis**
- **JRO Focus Areas**
  - **CBRN Monitoring & Survey**
  - **CBRN Field Analytics**
  - **WMD Consequence Management**
  - **Stand Off Detection**
  - **Developing Joint CbtWMD Leaders**



# *JRO's Role in the CBDP*

*Single office within DOD responsible for the planning, coordination, and oversight of joint CBRN defense operational requirements*

- **Lead joint CBRN defense capabilities development**
- **Develop and maintain the CBRN defense Overarching Operational Concept and the CBRND Modernization Plan**
- **Represent the Services and Combatant Commanders in JCIDS and act as their proponent for coordinating and integrating CBRND operational capabilities**
- **Develop DOD CBD POM with acquisition community support**
- **Facilitate the development of joint doctrine and training and sponsor the development of multi-service doctrine**
- **Oversee, manage and sponsor concept experimentation**



# Joint Staff and J8 Organization

**Chairman of the Joint Chiefs of Staff  
Admiral Mullen, United States Navy**

J-1

J-2

**J-3,  
Operations**

**J-4  
Logistics**

**J-8,  
Force Structure, Resources, &  
Assessment Directorate  
VADM Stanley, U.S. Navy**

**J-5, Strategic  
Plans & Policy**

J-6

J-7

**Deputy Director for  
Resources Acquisition**

**Deputy Director for  
Force Application**

**Deputy Director for  
Force Protection  
RADM Macy, U.S. Navy**

**Deputy Director for  
Force Management**

**Joint Integrated Air and Missile  
Defense Organization (JIAMDO)**

- Homeland Air Security
- Air and Missile Defense

**Joint Requirements Office –  
Chemical Biological, Radiological,  
& Nuclear (JRO-CBRN) Defense**

- CBRN Defense
  - Counter-proliferation
  - Non-proliferation
  - Consequence Management
- Homeland Defense

**Protection Assessment Division**

- Critical Infrastructure Protection
- Improvised Explosive Devices
- Personnel Protection
- Space Control Protection
- Insensitive Munitions
- Electronic Warfare Protection
- Continuity of Operations
- Continuity of Government
- Nuclear Weapons Security

**Services and COCOMS**



## *JRO as a J8 Division*

***Serve as the CJCS' single source of expertise to address all issues involving CBRN defense within passive defense, consequence management, force protection, and homeland security defense and civil support***

- **Chair and operate Combating WMD Working Group in support of Protection FCB**
- **Protection Capability Portfolio Management - Combating WMD**
- **WMD Consequence Management**
- **Nuclear Defense/Stand Off Nuclear Detection**
- **Coordinate Joint Combat Capabilities Assessment actions related to CWMD/CBRND (i.e. IPLs, GWOT LL, 7500)**
- **Joint Staff focal point for CBRN Survivability**
- **Joint Staff principal to BioDefense Policy Coordinating Committee, Homeland Security Council**
- **International Programs Support – NATO; bilateral policy exchanges (South Korea, UK, Japan); Australia, Canada, UK & US Memorandum of Agreement for CBRN defense**



# JRO – CBRND Roles and Responsibilities

## Concepts, Studies/Analysis

- Develop Operational Concepts
- Conduct CBAs
- Participate in experiments, demos and Joint Concept Technology Demos
- Oversee Joint Combat Developer for Experimentation
- Develop / manage studies
- Advocacy for Science & Tech/Modeling & Sim
- Coordinate Threat Capability Assessments
- Develop Analytic Agenda

## Mission Area Integration

- Develop Modernization Plan
- Coordinate CbtWMD WG
- Support Protection FCB
- Incorporate CWMD/CBRND Aspects for CPR and CPA
- Joint Capability Area coord
- Protection CPM for CWMD/CBRND
- Lead POM development
- Coordinate all Joint Staff/J-8 CWMD efforts
- Conduct Program Reviews and Readiness Reviews
- Coordinate liaison support
- Support International Efforts

## Capabilities Integration

- Identify/develop CBRND materiel capabilities (JCIDS)
- Manage Joint Capabilities Integration Development System documents
- Identify/develop CBRND Passive Defense non-material capabilities
- Provide warfighter advocacy to PMs, T&E, and Science & Tech organizations
- Coordinate Passive Defense doctrine and training issues
- Participate in Multi-national agreements with NATO and CANUKUS

## Consequence Management

- Manage *non-current ops* aspects of consequence mgmt (DSCA & foreign)
- Identify/develop CM, HD, and installation Protection material capabilities gaps (through CSA/other CBAs)
- Advocate CM//HD/IP material capabilities thru CIB (JCIDS)
- Advocate CM/HD/IP non-material capabilities thru applicable agencies (direct support from FLW)
- Advocate CM/HD/IP POM development through MAI

## Medical Integration

- Integrate and advocate for Medical capabilities across CBRND mission areas
- Manage Medical CBRND JCIDS documents ICW CIB
- Coordinate Medical CBRND capabilities with Services, COCOMs, OSD (ASD HA), Joint Staff, advanced tech developers and Medical S&T
- Participate in NATO Medical CBRN WG and BioMed WG; coordinate with AUSCANUKUS Med Requirements Tm
- Advise the Director, Deputy Director and JRO decision maker on Medical CBRND aspects

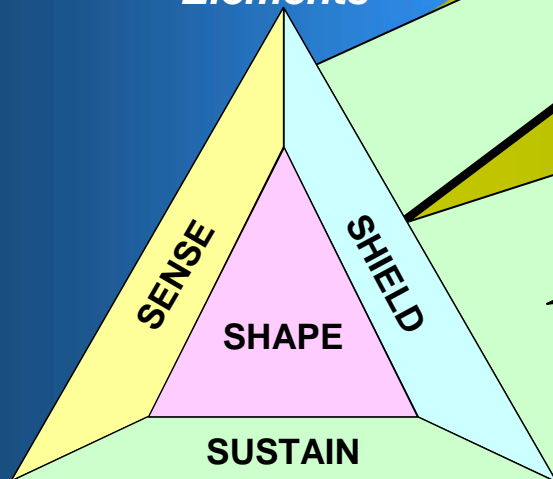


# ***CBRN Defense Operational Concept***

***Military  
Mission  
Areas***

***Military  
Strategic  
Objectives***

***CBRND  
Operational  
Elements***



**WMD Elimination**

**WMD Offensive Operations**

**WMD Passive Defense**

**WMD Consequence Management**

**WMD Active Defense**

**WMD Interdiction**

**WMD Security Cooperation &  
Partner Activities**

**WMD Threat Reduction Cooperation**

**Defeat,  
Deter**

**Defend,  
Respond,  
Recover**

**Prevent,  
Dissuade,  
Deny**

**Reduce,  
Destroy,  
Reverse**



# 29 CBRND Core Capabilities Areas

## **Sense**

1. Chemical Standoff Detection
2. Biological Standoff Detection
3. Chemical Point Detection
4. Biological Point Detection
6. Radiological Standoff Detection
7. CBRN Reconnaissance
8. Field Analytics
11. Radiological Point Detection
23. Medical Diagnostics

## **Shield**

9. Respiratory and Ocular Protection
10. Biological Prophylaxis
12. Percutaneous Protection
15. Chemical Prophylaxis
17. Fixed Site Collective Protection
21. Expeditionary Collective Protection
22. Radiological Prophylaxis

## **Shape**

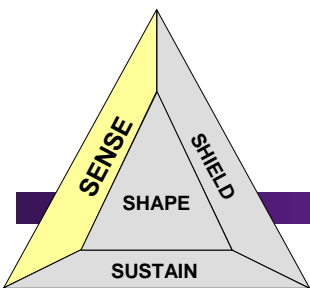
5. Integrated Early Warning
14. Battle or Operating Environment Management Systems
16. Battle or Operating Environment Management Analysis
25. Methods of Control
26. Medical Surveillance

## **Sustain**

13. Personnel Decontamination
19. Fixed Site Decon and Restoration
18. Equipment Decontamination
20. Biological Therapeutics
24. Chemical Therapeutics
27. Radiological Therapeutics
28. Hazardous Waste Control
29. Remains Disposition

*#s Indicate 2008 Joint Priority List*



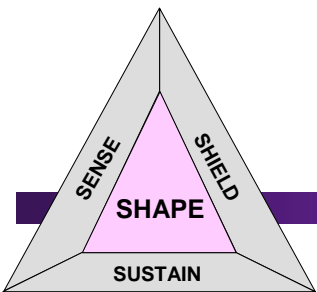


## *Sense Modernization*

- **Detection capability for NTA's, TIMs, lowest levels**
- **Determination of correct detector density and placement**
- **Reduce size/weight/power needs, reduce false positives while increasing range and sensitivity**
- **Solutions support sensor suite integration**
- **Laboratories process large quantities of samples and analyze for CBRN hazards simultaneously**

*The capability to continuously detect, identify, and quantify CBRN hazards in air, in water, on land, on personnel, and on equipment or facilities. This capability includes doing this in all physical states (solid, liquid, gas).*



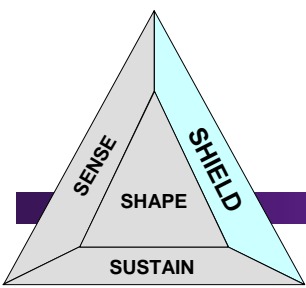


## *Shape Modernization*

- Expand network connectivity for CBRN-related data flow
- Algorithms which accurately predict and assess hazards that support integrated medical and non-medical analysis
- Automated planning tools/decision aids to assess CBRN hazard affects and impacts directly to personnel, equipment, and terrain
- Medical surveillance providing early biological attack warning interfacing military and civilian systems

*The capability to characterize the CBRN hazard to the force commander. There are four CBRND core capabilities designated for the Shape area, and all DOTMLPF improvements to CBRND Shape can be categorized under one or more of these core capabilities.*



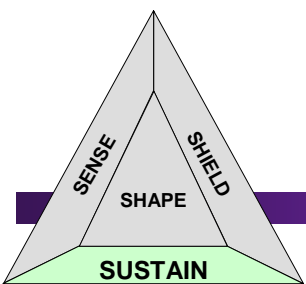


## *Shield Modernization*

- Ensuring personnel (including casualties), military working animals, equipment, and facilities are protected against WMD agents, including TIMs and NTAs with minimal or no degradation
- Food and Drug Administration (FDA)-approved medical countermeasures that provide broad-spectrum protection from CBRN agents and have an operationally acceptable incidence of adverse reactions
- Collective protection is integrated in all critical systems that support operating in an unencumbered environment

*The capability to protect the force from degradation caused by CBRN hazards by preventing or reducing exposures, applying prophylaxis to prevent or mitigate negative physiological effects, and protecting critical equipment.*





## *Sustain Modernization*

- Decontamination products against all CBRN threats with reduced personnel hazards, including better mass casualty decontamination capabilities
- Improved decontaminants with less detection equipment interference that are environmentally safe, and are nonhazardous to sensitive equipment and electronics
- Expanded FDA-approved identification and diagnostic capabilities are fully integrated into command, control, computers, communication, and information intelligence systems

*The capability to conduct decontamination and medical actions that enable the quick restoration of combat power, maintain/recover essential functions that are free from the effects of CBRN hazards, and facilitate the return to pre-incident operational capability as soon as possible.*



## *Non-Material Solutions*



- **Enablers that facilitate DOD capabilities**
- **Joint experimentation is planned that will explore and link joint concepts to non-materiel issues, gaps, and proposed solutions**
- **JRO's Non-Materiel team of the Capabilities Integration Branch established to facilitate the development of multi-Service and joint doctrine and development and presentation of CWMD/CBRN/WMD CM training and leader development.**



# *WMD Consequence Management Modernization*



- These measures may use similar specialists and equipment as passive defense; however, they are intended to mitigate CBRN hazards to unprotected personnel over the long term as opposed to those immediate actions required to maintain operational tempo during a military operation
- Similar to the requirement for homeland defense, interoperable equipment and interagency doctrine/mutual aid agreements must continuously be developed to facilitate support and pre-coordination between DOD assets and lead federal agencies

*The capability to protect public health and safety; restore essential government services; and provide emergency relief to governments, businesses, and individuals affected by the consequences of a CBRN or a high-explosive situation.*



## *The Challenge*



- **Global conflict hasn't changed, the difference is WMD proliferation**
- **Expanding roster of radical fundamentalists makes international cooperation even more important**
- **Adversaries may employ irregular, catastrophic, disruptive strategies including asymmetric attacks and WMD to challenge US power**

***Military forces must be prepared to deal with the full spectrum of threats and they must be able to operate in all WMD environments, unconstrained by these effects.***



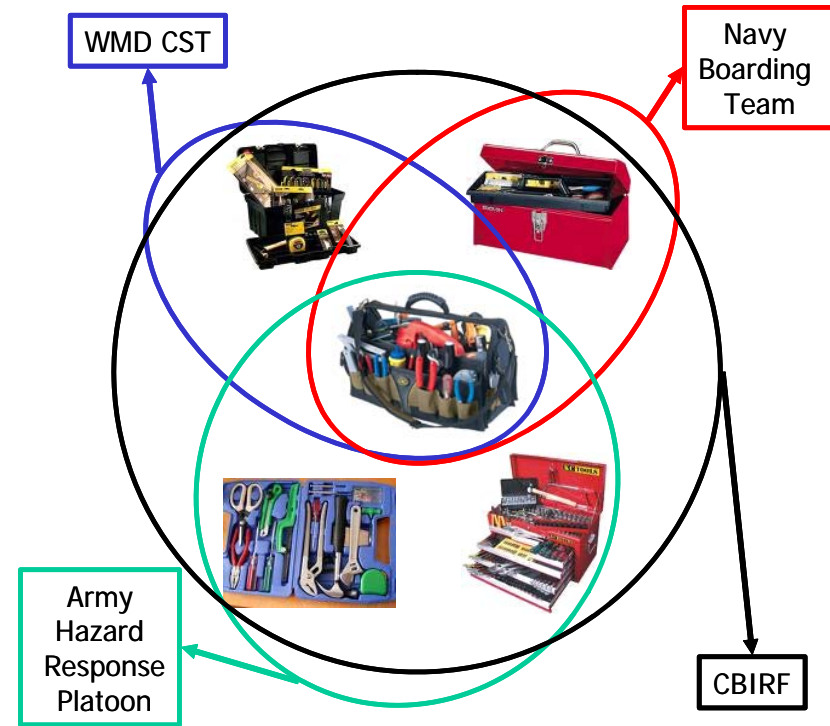
- CBRN Monitoring & Survey
- CBRN Field Analytics
- WMD Consequence Management
- Stand Off Detection
- Developing Joint CbtWMD Leaders





# CBRN Monitoring & Survey

- Common set of components
- Configured into kits
- Supports each Services' mission requiring
  - dismounted CBRN reconnaissance
  - WMD confirmation or denial
  - characterization of a hazardous materiel event or accident
- Acquisition Strategy
  - Commercial-Off-The Shelf (COTS)
  - Government-Off-The Shelf (GOTS), and
  - Non-Developmental Item (NDI)





- **Current laboratory variants are not sustainable**
- **Common analytical capabilities across the CWMD portfolio increases confidence, sampling capability, and supports both Homeland Defense & forward deployed CBRN detection capabilities**
- **Key capabilities will focus on a modular approach**
  - **Analytical equipment**
  - **Analytical processes**
  - **Personnel staffing**
  - **Expandable laboratory design**





# WMD Consequence Management

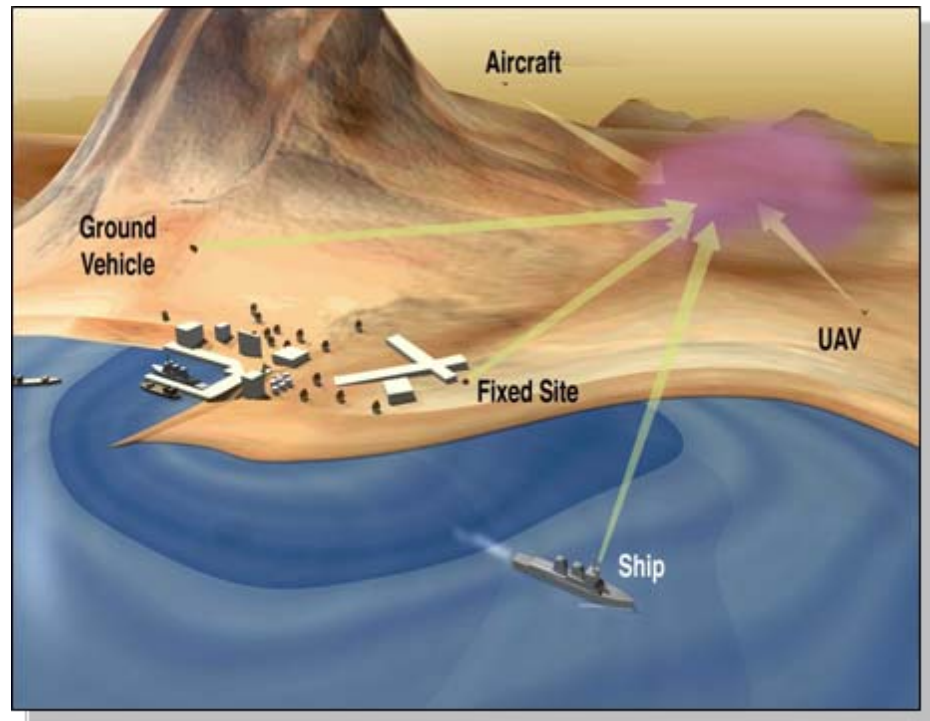
- Standardize and “institutionalize” CM capabilities
  - detection
  - identification
  - decontamination
  - protection
- Treat WMD CM as a “core” mission
- Complete DOTMLPF approach





# *Stand Off Detection*

- Continued high priority capability for warfighters
- Includes CB and Radiological/nuclear – vapor & liquid/solid
- Heightened interest in “pre-event” detection of SNM
- Technical challenges of distance, shielding, power, platform, etc.





# *Developing Joint CbtWMD Leaders*

- **Problem** - Shortage of senior leaders able to plan and conduct CbtWMD operations in an uncertain environment
- **Approach** – use education, training and exercises as substitute for years of experience and assignments
- Joint Professional Military Education (JPME) curriculum development support
- JPME course and exercise participation (Joint Forces Staff College; USMC Command and Staff College; Joint Flag Officers Warfighting Course)
- National Defense University Center for the Study of WMD – JPME focal point for combating WMD
- COCOM staff training and exercise support – USNORTHCOM and USSTRATCOM





## Contact Info:

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Chief, Mission Area Integration Branch

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Chief, Concepts, Studies and Analyses Branch

LTC Jeff Steel

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Chief, Medical Branch

LTC Robert von Tersch

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(703) 571-3070

Chief, Consequence Management Branch

Lt Col Doug Hardman (Inbound)

(703) 571-3092

Mr. Michael Brennan (Acting)

[michael.brennan@js.pentagon.mil](mailto:michael.brennan@js.pentagon.mil)

(703) 571-3090



# 2009 Joint CBRN Conference & Expo

June 23-25, 2009

Ft. Leonardwood, MO

**CHEMICAL BIOLOGICAL DEFENSE  
ACQUISITION INITIATIVES FORMUM  
(CBDAIF)**



# CBD AIF Charter

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## Objectives

- Review, discuss, and recommend initiatives in the area of acquisition excellence.
- Examine industry and government practices that impact the acquisition of goods and services that support the DOD efforts related to chemical and biological defense.



# Mission

---

*Develop and encourage the use of innovative procurement and acquisition procedures for supporting and acquiring chemical and biological defense program (CBDP) related goods and services in order to better meet the needs of all stakeholders in the process.*



# CBD AIF Operation

---

- Formed from NDIA Corporate Membership consisting of team members representing the various segments of the industrial base
  
- Permanent members
  - JPEO Chemical Biological Defense
  - Special Assistant to JPEO for External Affairs
  - Director, DTRA JSTO
  - Vice President of Operations, NDIA
  - Director, RDECOM Acquisition Center



# Industry Sectors Represented

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- Remedial Construction & Non-Stockpile
- Detection
- Operations & Maintenance
- Protective Equipment
- Filter Technology
- Decontamination
- Small Business
- Systems Integration
- Medical/Pharmaceutical
- Surety Laboratories
- Professional Services



# Terms and Procedures

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- The CBDAIF meets 3-4 times per year.
- Representatives and industry Co-Chair serve for 2 years with approximately half the representatives being rotated each year.
- Sector representatives are company senior executives, but must provide unbiased representation of their sector and not their company.
- Topics of interest are solicited from members, and interested government agencies.
- Subcommittees are formed as necessary to evaluate specific topics.



# Recent CBDAIF Discussions

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- Backlog in Security Clearance Investigations
- Impact of Proposed Biosurety Regulations
- Ideas for Speeding Up the Contracting Process
- Small and Disadvantaged Business Participation
- Export Approval Processes (Subcommittee)
- Sales to State and Local Governments
- Science and Technology and Research and Development Initiatives
- Procurement Funding Trends



# Current Industry Membership

Industry Sector	Representative
Remedial Construction and Non-Stockpile	Larry Sparks, Washington Group
Detection	John Wade, Battelle
Operation and Maintenance	Joe Pecoraro, Parsons
Protective Equipment	Marilyn Ripin, Smiths Detection
Filter Technology	David Yokota, Honeywell
Decontamination	Tim Henry, Bracco Diagnostics
Small Business	Rey Almodovar, IRTC
System Integration	Claudia Randolph, ITT Corp
Medical/Pharmaceutical	Mark Logomasini, SAFC Pharma
Surety Laboratories	David Mangino, CUBRC
Professional Services	Nicole Funk, Booz Allen Hamilton
Co-Chairman	Vince Nardy, Hunter Defense Tech.



# Current Government Membership

<b>Government Representative</b>	<b>Affiliation</b>
BG Jess Scarbrough	JPEO CBD
COL Benjamin Hagar	Deputy Director, DTRA
Dr. Darrell Galloway	DTRA, Joint S&T Office, Director CB Tech
Mr. Steven Bryant	RDECOM Acquisition Center
Mr. Dennis Longo	Procurement, RDECOM
Mr. Larry Wakefield	JPEO-CBD, External Affairs
Mr. Douglas Bryce	DPEO for CBD, JPEO CBD
<b>NDIA Representative</b>	
BG Dean Ertwine (Ret)	VP Army Sector, Battelle Eastern S&T
MG Barry Bates (Ret)	VP Operations
Mr. Michael Dauth	Director, Operations



# Sector Representation

---

- Sector Representatives use a list of Sector Companies maintained by NDIA from which to solicit subject matter for the forum and to share feedback.
- Sector Companies are typically surveyed Quarterly for interests, issues and opinions.

Interested in becoming a Sector Company ?

Contact your Sector Representative or  
Mike Dauth at NDIA



# In Summary

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**We encourage broad participation in order  
to get Industry input on issues pertaining  
to the CB Community.**

**Join us!**





# **Department of Defense Chemical Biological Defense Program**

**Mr. Jean D. Reed**

**Deputy Assistant  
to the Secretary of Defense  
for Chemical and Biological Defense/  
Chemical Demilitarization  
DATSD (CBD/CD)**

*June 25, 2009*

**<http://www.acq.osd.mil/cp/>**





# **Chemical Biological Defense Program (CBDP) Overview**



- **Background**
- **Organization**
- **Global Security Environment**
- **Strategic Priorities**
- **CBDP Funding**
- **Major Thrust Areas**
- **Way Ahead**
- **Measures of Success**





# Chemical-Biological Defense Program



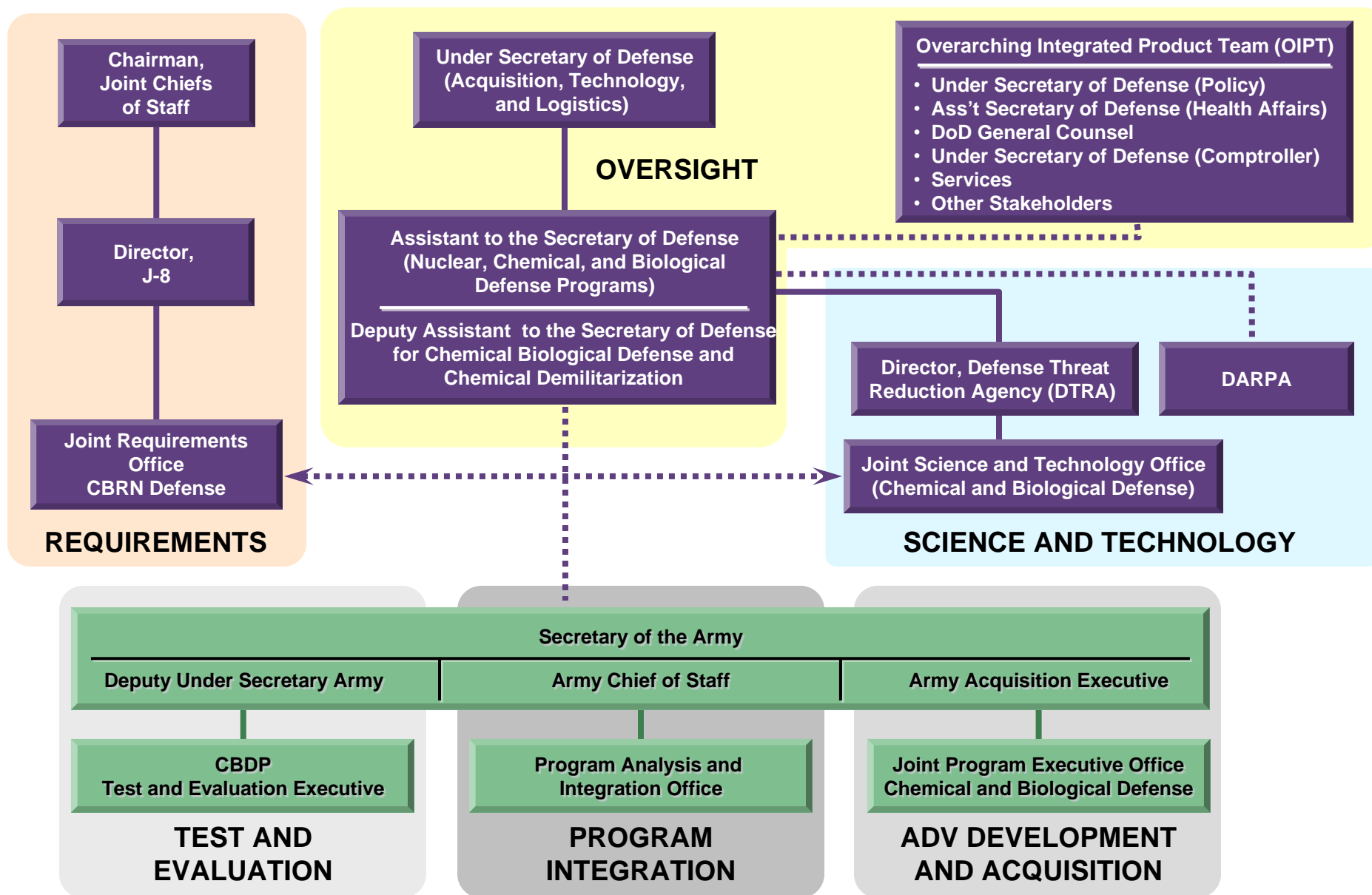
- Established by Congress in 1994, Re-organized in 2003
- Consolidated all DoD CB defense efforts into defense-wide funding accounts overseen by a single office - ATSD(NCB) – within the Office of the Secretary of Defense
- **Vision:** to ensure DoD operations are unconstrained by Chemical, Biological, Radiological, and Nuclear (CBRN) effects
- **Mission:** to provide CBRN Defense capabilities in support of the National Military Strategies

**Realizing the vision and mission of the CBDP will ensure we sustain our competitive advantage**





# CBDP Organization







# CB Defense Program Senior Leadership




**Chairman, Joint Chiefs of Staff**




**Admiral Mike Mullen**

**Under Secretary of Defense (Acquisition, Technology and Logistics)**




**Dr. Ashton Carter**

**Director for Force Structure, Resources and Assessment, J8 The Joint Staff**




**Vice Admiral P. Stephen Stanley**

**Assistant to the Secretary of Defense (Nuclear and Chemical and Biological Defense Programs)**




**Hon. Andrew C. Weber**

**Acting Director, Defense Threat Reduction Agency**




**MG Randy Manner**

**Director, Joint Requirements Office CBRN Defense**




**RADM Archer M. Macy, Jr.**

**Deputy Assistant to the Secretary of Defense for Chemical and Biological Defense/Chemical Demilitarization**



**Mr. Jean D. Reed**

**Director, Joint Science and Technology Office for Chemical and Biological Defense**



**Dr. Darrell Galloway**

**Joint Combat Developer**




**COL (Promotable) Les Smith**

**Acting Assistant Secretary of the Army for Acquisition, Logistics and Technology**



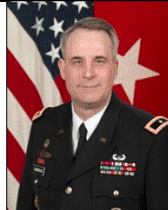
**Mr. Dean Popps**

**CBDP Test and Evaluation Executive**



**Mr. James C. Cooke**

**Joint Program Executive Officer for Chemical and Biological Defense**



**BG Jess Scarbrough**





# DoD Lead for Interagency Chemical and Biological Defense Activities



## CBDP Coordinates Continuously With:



Counterproliferation Program  
Review Committee (CPRC)



Technical  
Support Working  
Group (TSWG)



U.S. Coast  
Guard



Centers for Disease  
Control (CDC)



National Institute  
of Allergies and Infectious  
Diseases (NIAID)



Department of  
Homeland Security  
(DHS), S&T  
Directorate

## CBDP Coordination/Cooperation Exists With:



U.S. Department of  
Agriculture (USDA)



Department of  
Health and Human  
Services (DHHS)



Office of Science  
& Technology  
Policy



Department  
of Justice



National Security  
Council (NSC)





# Global Security Environment

## **Threat**

- Pervasive
- All types of conflict
- Every Possible Region
- Asymmetric (seeks WMD)
- Adaptive

## **Overseas Contingency Operations:**

Priority to Maintaining Homeland  
Defense and Security

## **Major Challenges**

- Traditional
- Irregular
- Catastrophic
- Disruptive

## **Multitude of Stakeholders**

- Joint
- Interagency
- International

**Failure to address this  
environment with the right  
mix of CBRN capabilities  
will increase risk to the Force  
and the Homeland**





# DoD Strategic Priorities in CWMD



- **Increase barriers to WMD proliferation and use**
- **Develop layered integrated WMD defense**
- **Improve ability to identify and mitigate emergent WMD threats**
- **Neutralize WMD threats emanating from failing, fragile states**





# ATSD(NCB)'s Strategic Guidance for the CBDP

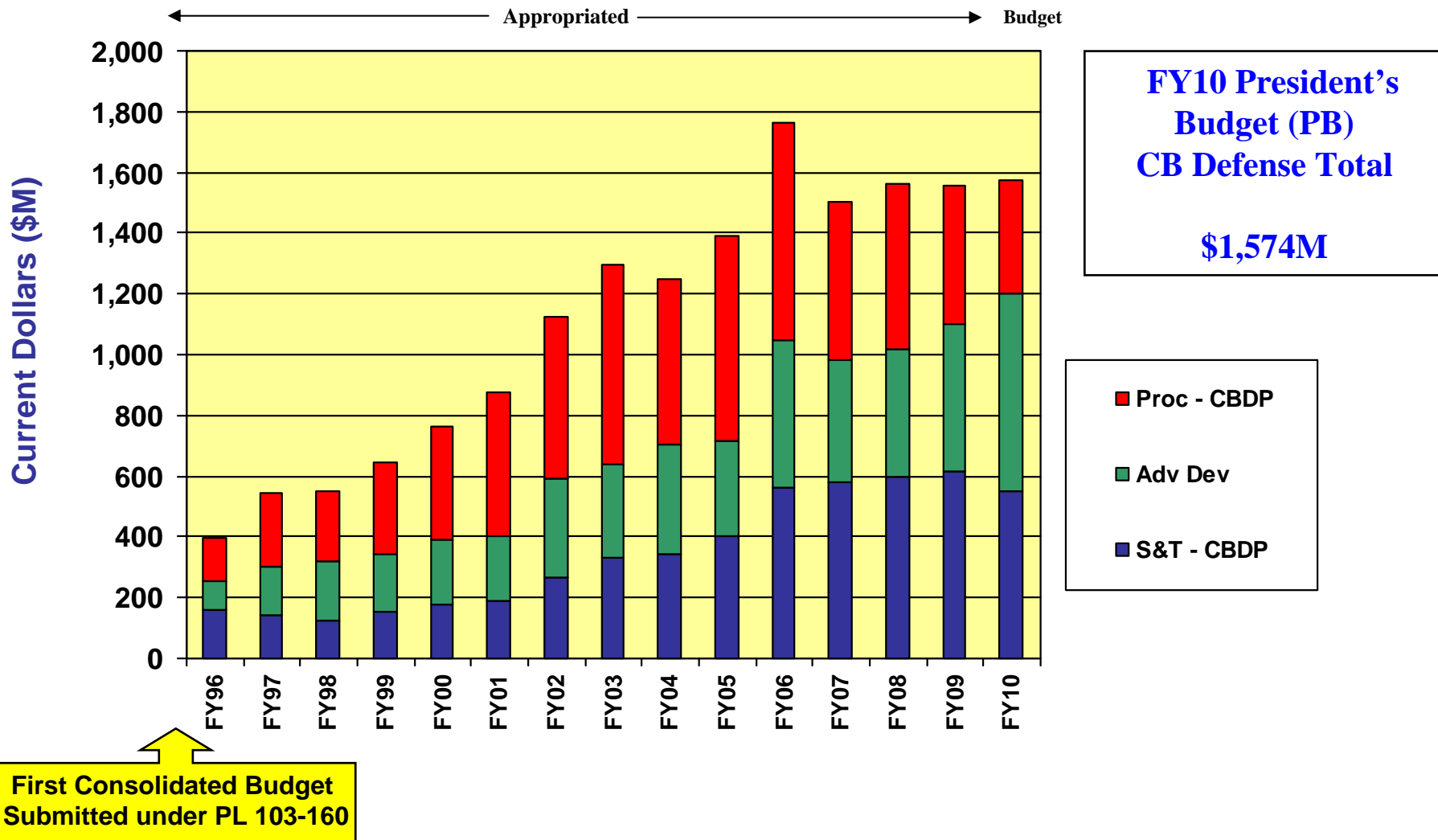


- Provide a balanced CBDP to support National Military Strategies and Departmental objectives to improve CBRN Defense readiness and reduce operational risk.
- Build a comprehensive fiscal plan wherein *budgets* flow from programs, *programs* from capability needs, *capability needs* from missions, and *missions* from *national security objectives*.
- Provide operational capabilities to the Joint Force for CBRN defense.
- Define and develop capabilities to increase significantly our ability to dissuade, deter, defend, and defeat.
- Sustain the capability of the Joint Force to respond in any CBRN crisis.
- Improve management practices to fulfill enterprise strategic roles and missions.





# CBDP Funding (FY1996-2010)



## Trends:

- Total CBDP funding steadily increases from FY96, but begins to stabilize at approximately \$1.6M in FY08.
- In FY06, CBDP RDT&E funding increased significantly as a result of Program Budget Decision (PBD) 753/746.





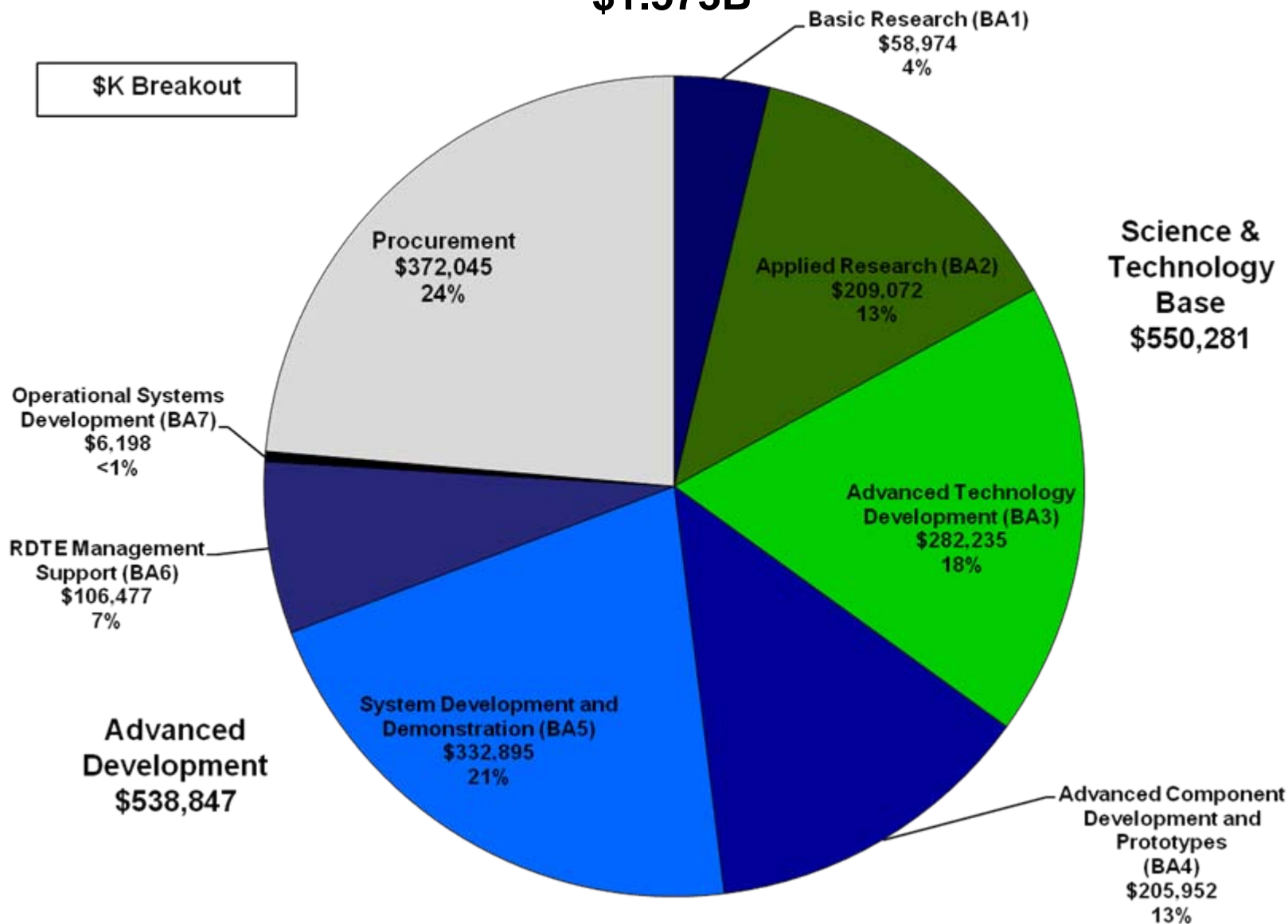
# Chemical Biological Defense Program

Based on FY10 PB Request

\$1.573B



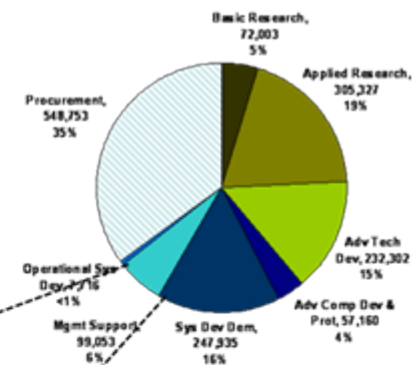
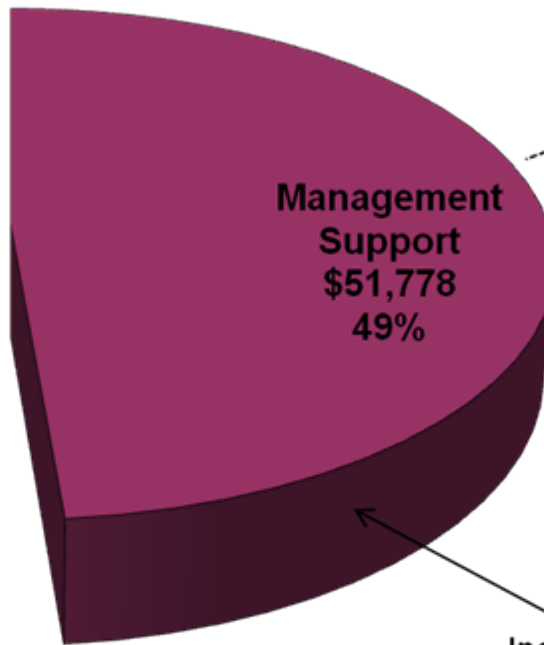
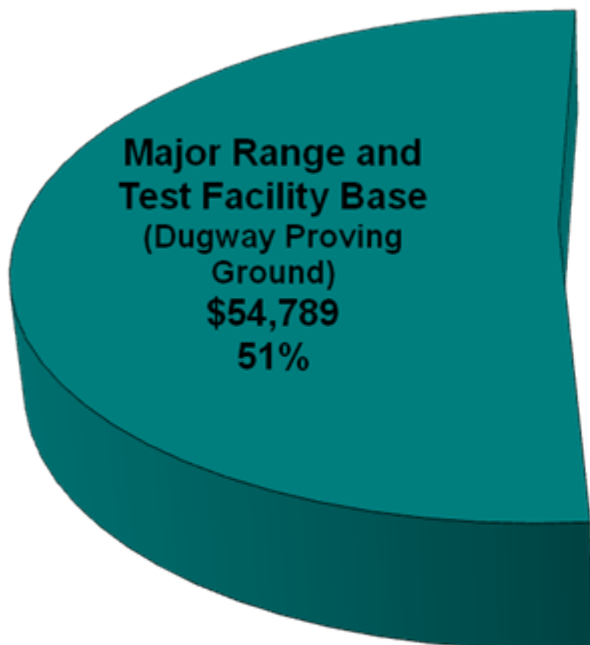
\$K Breakout







# FY10 RDT&E Management Support (\$106.4M)



Includes:

- Joint Requirements
- Joint Concept Development & Experimentation Program
- Joint Doctrine & Training Support
- Information Systems
- RDT&E Management Support
- Laboratory Support





# CBDP Thrust Areas

- Emerging Chemical Threats
- Emerging Biological Threats
- TMTI
- Consequence Management
- Preparedness
- Training





# Chemical

Threat

## Traditional Threats

- Traditional chemical warfare threats (nerve, blood, and blister)
- Agents designed for military operations/applications

## Enhanced Threats

- Small levels of CBRN hazards, not necessarily weaponized, caused by a terrorist incident that may cause mass casualties.
- Next generation agents

## Emerging Threats

- Nontraditional CBRN hazards
- Toxic industrial materials (TIM) hazards
- Toxic Industrial Chemicals (TIC)

## Advanced Threats

- Unforeseen CB agent threats
- Asymmetric applications and/or engagements







# Biological Threats

## Traditional Threats

- Intracellular bacterial pathogens
  - Anthrax
  - Plague
  - Tularemia
- Viral hemorrhagic fevers
  - Ebola
  - Marburg
  - Junin

## Emerging Threats

- Natural and emerging diseases:
  - H1N1
  - Cholera
  - Pandemic flu
  - SARS
  - Drug-resistant TB
  - Malaria
- Multi-drug and vaccine resistant pathogens



## Enhanced Threats

- “Bioprospecting” to find particularly virulent strains in nature
- Cultivating particularly virulent strains of pathogens in the laboratory

## Advanced Threats

- Adding, deleting or mutating genes to engineer pathogens that are more resistant, transmissible and virulent
- Creating viruses *de novo*

Threat





# Transformational Medical Technologies Initiative (TMTI)



Accomplishments



Provides innovative solutions to the Warfighter by:

- Developing broad-spectrum countermeasures and novel technology platforms (*one drug, many bugs*)
- Pursuing countermeasures targeting common disease pathways or enhance the host's immune system
- Integrating best efforts within government, academia, DoD, biotech industry, and small and large pharmaceutical corporations
- Providing seamless “end-to-end” product development
- Eliminating capability gaps by adding promising candidate technologies to the pipeline
- Using milestone-driven management to select the highest-quality performers with the best value products aligned with the program mission

Images courtesy of the CDC



# Bringing Homeland Security & Defense Together

Department of  
Homeland  
Security

Homeland Security Presidential Directives  
National Security Strategy

Department of  
Defense (DoD)

National Response Plan

Installation Protection Steering Group  
NORTHCOM Force Protection Working Group/J34  
Integrated Unit Base Installation Protection (IUBIP) CBA

- National Incident Management System
- All Hazards
- BioWatch
- Grant Programs

- Instructions
- Directives
- Homeland Defense Strategy
- Anti Terrorism/ Force Protection Policy
- All Hazards

**Civil Community**

**Military Community**

Integration of Policy, Guidance and Capability Solutions

Fielding at 37 Installations in FY2010-FY2011

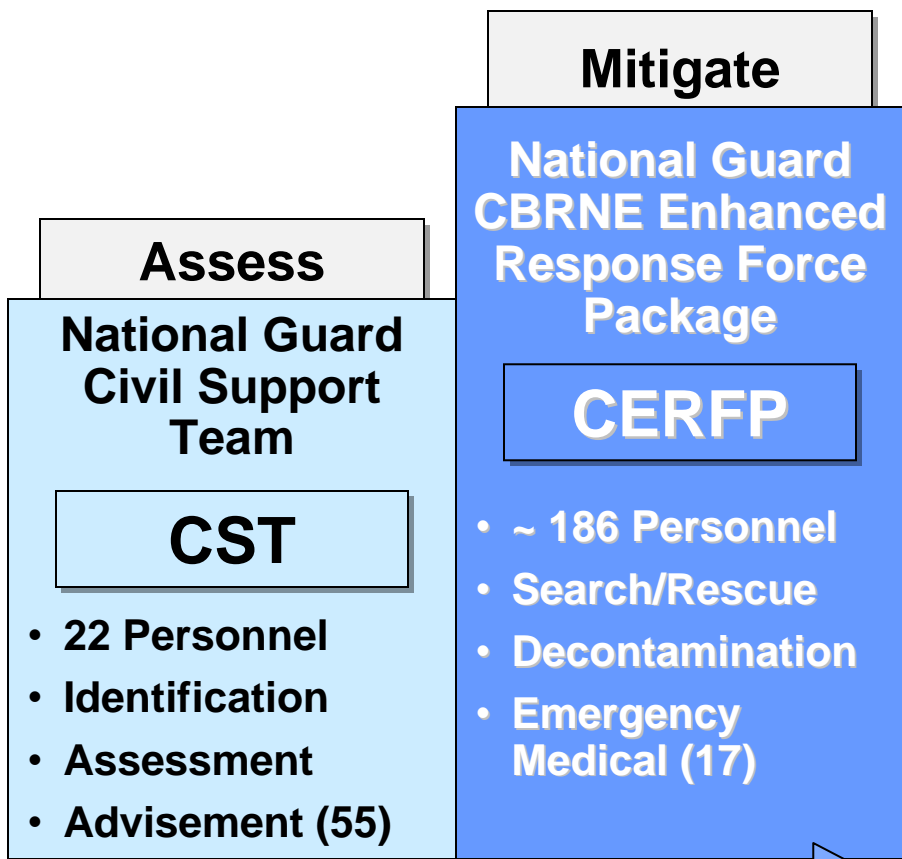




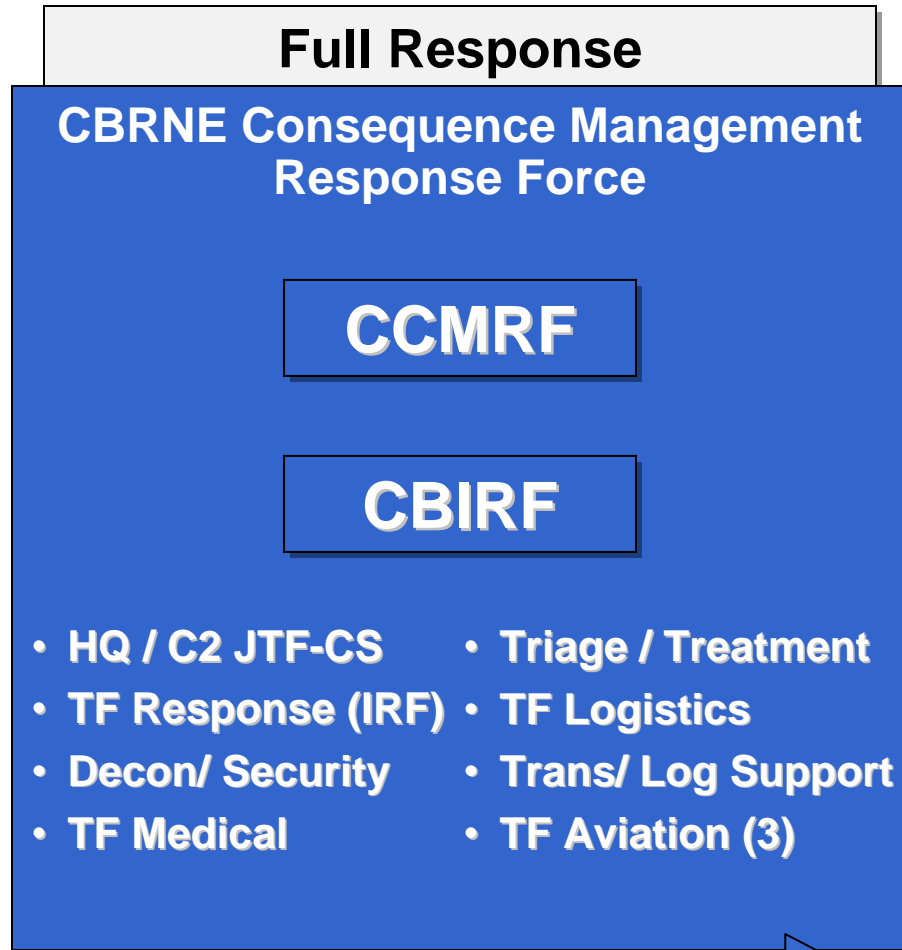
# Domestic CM Response Forces

## State Response (Title 32)

## Federal Response (Title 10)



*Employable first 24-48 hours after incident*



*48+ hours after incident*





# Consequence Management/Homeland Defense



Fielding improved Analytical and Incident Management capabilities to NGB / CSTs →

- Expanded TIC/TIM detection capability
- Broader range of sample matrixes
- Improved communication capabilities including secure video, satellite communications, and secure VTC



Equipping and Fielding 20<sup>th</sup> Support Command WMD CE, TEU, Nuclear Disablement Teams, and Mobile Laboratories →

- Provided 20<sup>th</sup> with advanced mobile Chemical, Biological, Radiological and Explosive identification capability for short-term and extended missions, supporting DHS and contingency operations



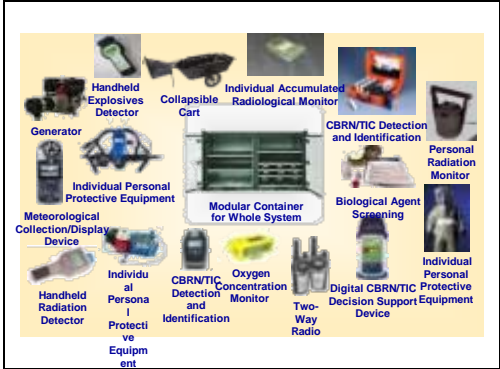
Fielded 81 Chemical / Biological Incident Response trailers to the U.S. Army Reserve Reconnaissance / Decontamination Platoons →

- Providing rapid deployability for Army Reserves to support civilian authorities in response to a CBRN event



Fielded 12 DRSKO interim systems to NORTHCOM and Army Units in response to a Joint Urgent Operation Needs Statement (JUONS) →

- Providing Dismounted Reconnaissance Sets, Kits and Outfits
- Providing Monitor and Survey Sets, Kits and Outfits



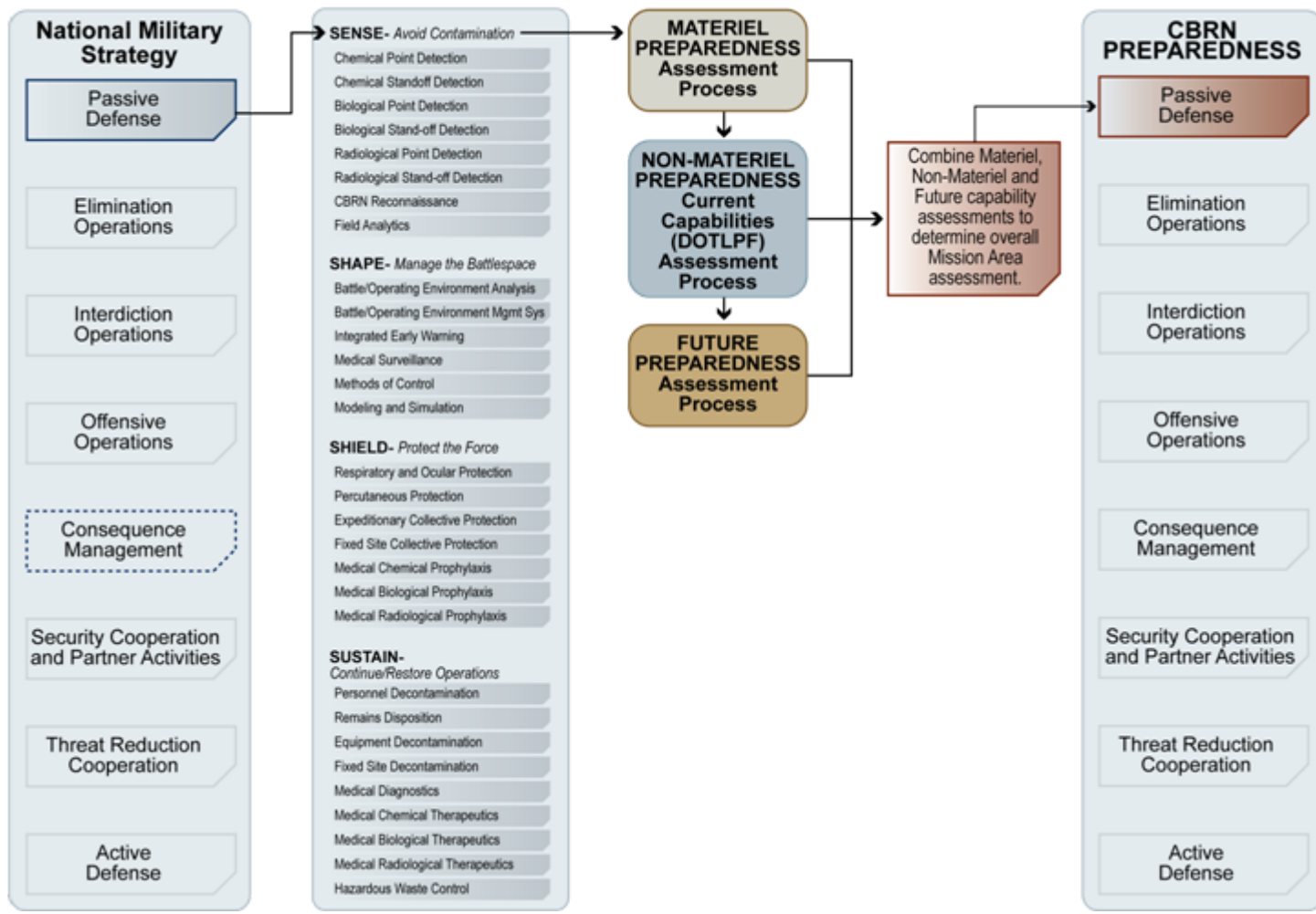
## Enhancing Domestic Response and Reserve Capability





# Preparedness Assessment – Process Strategies & Linkages

## CBRN Defense Preparedness Strategy



Integrated capabilities based assessment with metrics aligned to core capabilities





# Training



- DoD CBRN Doctrine, Training, Leadership, and Education (DTL&E) Strategic Plan (Dec 2008)
- DoD CBRN Doctrine, Training, Leadership, and Education (DTL&E) Implementation Plan (May 2009)
- Establishes Four Objectives:
  - *Improved, Integrated, and Unified CBRN Defense Operations*
  - *Sustained Adaptive and Innovative Environment*
  - *Aligned CBRN Defensive Training Infrastructure*
  - *Established Performance-Based Management Process*
- *Way Ahead:*
  - *Develop & Execute a mitigation strategy for validated CBRN defense gaps and shortfalls.*
  - *Initiate changes to policy, authority, and guidance documents, as appropriate.*
  - *Coordinate DoD-wide CBRN defense preparation and submission of the President's Budget and POM resource decisions.*
  - *Continue assessments to identify required policy, authority, guidance, and direction to enhance Joint operations.*





# Way-Ahead: CBDP in the Next 5-10 years

To execute effectively for the next 5 to 10 years, the CBDP depends on continued Congressional support in three priority areas:

- Consistent resources for the overall program to ensure that, year after year, the CBDP is able to field improved defensive capabilities essential to ensuring our military can operate in any environment, unconstrained by CBRN threats.
- Adequate funding for the TMTI to exploit fully the advanced S&T innovation necessary to counter successfully future genetically engineered biological weapons and any newly emergent or bioengineered pathogen. This will improve the nation's military health infrastructure to deal with changing and emerging threats.
- Adequate far-term investment in the RDT&E infrastructure to enhance our RDT&E capabilities, including the modernization and construction of laboratories and test facilities needed to ensure the efficient and effective development of advanced countermeasures against current and emerging CBRN threats. These threats include both traditional military threat agents and emerging chemical threats.

Future Vision





# Our Measure of Success

Our Soldiers, Marines, Sailors, and Airmen continue to lead the world in CBRN defense capabilities:

- *Obtain* the necessary DOTMLPF integrated solutions for components, systems, and systems-of-systems
- *Continue to develop* new defensive capabilities in anticipation of the continued evolution of WMD threats
- *Provide* CBRN Defense capabilities in support of the National Military Strategies
- *Realize* the vision to ensure that DoD operations are unconstrained by CBRN effects through that same integration

Inherent responsibility of the CBDP Enterprise is to create a **Joint Force** with Warfighters better organized, trained, equipped, and resourced than in the past to deal with the WMD threat





# Questions

<http://www.acq.osd.mil/cp/>





# ***Joint CBRN Combat Developer***

***U.S. Army CBRN School***

***COL (P) Les Smith***

***Briefing for JCBRN Conference***

***25 June 2009***





# ***Agenda***



- **Mission**
- **Authority**
- **Joint CBRN Combat Developer**
  - **Joint Experimentation and Analysis**
  - **Joint Threat Support**
- **Doctrine Support**
- **Training Support**
- **International Update**
- **Operational Update**
- **Summary**





# Criticality of Our Mission



*“The Commission believes that unless the world community acts decisively and with great urgency, it is more likely than not that a weapon of mass destruction will be used in a terrorist attack somewhere in the world by the end of 2013. The Commission further believes that terrorists are more likely to be able to obtain and use a biological weapon than a nuclear weapon.”*

**Senator Bob Graham, Commission Chair**  
**The Report of the Commission on the Prevention**  
**of WMD Proliferation and Terrorism,**  
**December 2008**





# ***JCD Mission***

Conduct realistic experiments for the Department of Defense Chemical and Biological Defense Program by systematically exploring new and innovative combinations of medical and non-medical Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities (DOTMLPF) capabilities.

**to reduce risk and cost in materiel development**

# ***JEAD Mission***

Coordinate and oversee execution of Joint and Multi-Service experiments used to validate the Joint Integrating Concept for CBRN Defense





# ***Joint Experimentation and Analysis***







# ***JEAD Completed Experiments Since last JCBRN Conference***

- **Joint Concept for CBRN Contamination Mitigation**
  - Final report dated October 08
- **Sensitive Site Exploitation/Assessment Linkage**
  - Final report dated October 08
- **Mass Casualty Decontamination**
  - Final report dated May 09
- **Modular Mobile Laboratory**
  - Final report dated June 09



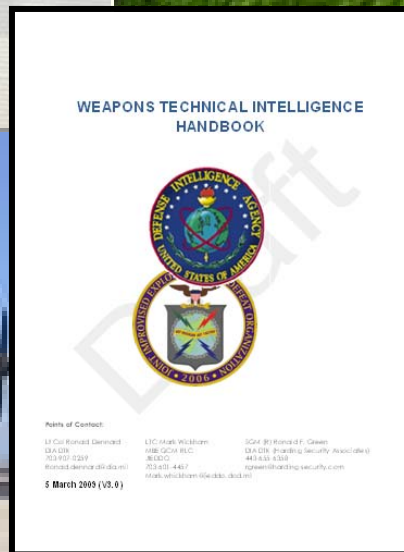




# JEAD On-Going Experiments



- **Air Crew Duration**
  - Projected for 4Q FY09 completion
- **CBRN Intelligence Fusion**
  - Projected for 4Q FY09 completion
- **Unmanned CB Vehicle CONOPS**
  - Projected for 4Q FY09 completion







# ***JEAD On-Going Experiments***



- **CBRN Hazardous Awareness and Understanding**
  - Projected for a 4QFY09 completion
- **Joint Forces in a Contaminated Environment**
  - Projected for 1QFY14 completion







# ***JEAD Future Experiments***

- **Automation/Robotic Decontamination**
- **Impacts of Alternate IPE to Squad & Teams**
- **Operational Level Decontamination Assessment**
- **18 Joint Experiment Nominations received by the JRO for FY 2010-2011**







# ***Joint Threat Support***







# ***JTSB Foundation***

**Mission:** Develop and coordinate intelligence and threat support products as required by CBRND acquisition programs and experimentation.

## **Key Accomplishments:**

- Completed 2 Joint Test Threat Support Packages (JNBCRS, JCAD, and 1 STAR)
- JCAD, JBPDS, JBTDS, pending (Working on vignettes for the JCAD JTTSP)
- Working on 5 STARs 2 year updates.







# ***Doctrine Support to the Joint CBRN Force***







# Joint CBRN Doctrine



Joint Doctrine

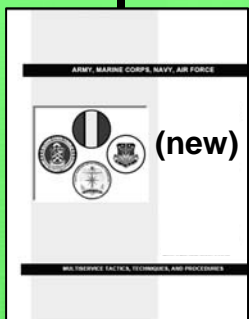
Combating WMD



NBC Defense



CBRN Operations



WMD  
Elimination



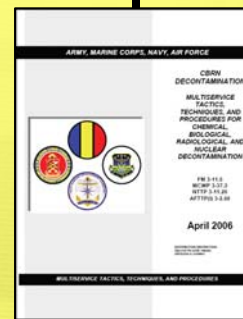
CBRN  
Contamination  
Avoidance

SENSE



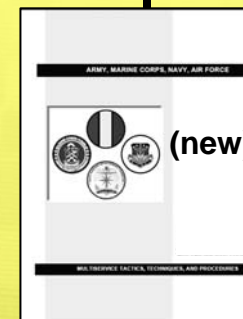
CBRN  
Protection

SHIELD



CBRN  
Decontamination

SUSTAIN



CBRN  
C2

SHAPE



CBRN  
Consequence  
Management

No longer just **PASSIVE DEFENSE**

Stability Operations

**Major Combat Operations**

Civil Support

Across the Entire Range of Military Operations...





# ***Training Support to Joint CBRN Force***







# Training



## Professional Courses

- Developing adaptive Soldiers and Leaders operating with all services
- “How to think”

**\*All our courses are open to all Services**

## Functional Courses:

- Civil Support Skills Course
- Mass Casualty Decon
- Technical Escort
- FOX (L5) / Stryker (L6)
- Radiation Safety

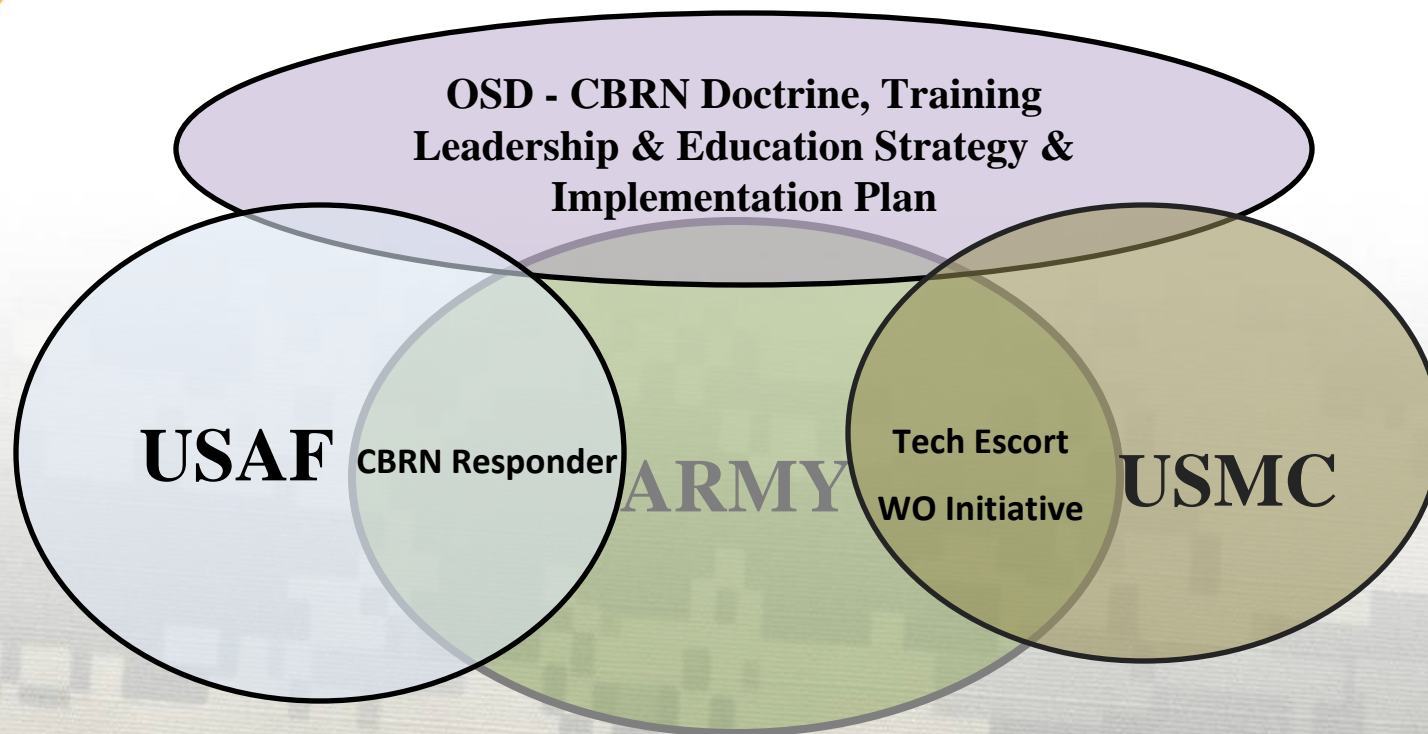
## GOAL:

- Training reflects full range of CBRN threats, WMD-E and Consequence Management missions
- Expanding chemistry, biology and radiological sciences (i.e., explosive chemistry)
- Institutionalization of COTS protection and detection equipment
- Joint/Inter-agency focus
- Full suite of automated Warning/Reporting/Analysis systems
- Supports critical Homeland Security Skills (CST, CCMRF and CERFP)





# CBRN Joint/Multiservice Training



## New/Ongoing Efforts:

- Participation in DoD DTL&E Strategy and Implementation Planning
- USAF began training 3E9 Emergency Management in the CBRN Responder Course
- USMC trains in and shares instructor responsibilities for Tech Escort training
- Evaluating USMC participation in 74D10 AIT and CBRN Responder training
- Evaluating Army CBRN Warrant Training in USMC Warrant Officer Course

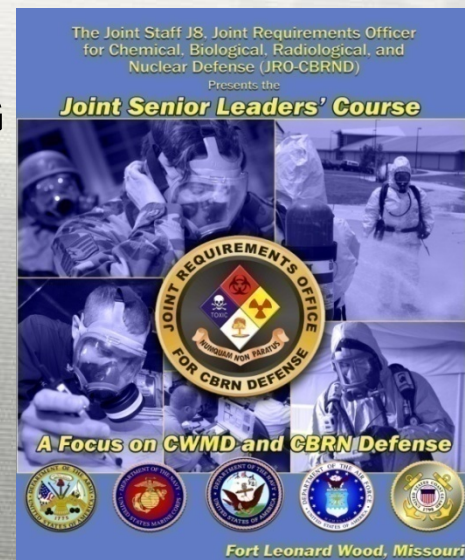




# Joint Senior Leaders' Course



- JRO sponsored, USCBRNS hosted, 3 times a year
- Target audience is O-4 and above/civilian equivalent/E9
- Operational to strategic level focus on DoD's Combating WMD efforts
- Toxic agent training in the Chemical Defense Training Facility (CDTF)
- Interagency participation: DNI, DOS, DHS, FBI, USCG
- Coalition partner participation: UK, Canada
- Course dates:
  - 10 - 13 December 2009
  - 15 - 18 April 2010
  - 22 - 25 July 2010
- Point of contact is Terry Johnson, JRO-CBRND FLW, at (573) 563-6090 or [terry.johnson28@conus.army.mil](mailto:terry.johnson28@conus.army.mil)







# Chemical Knowledge Network (CKN)



The screenshot displays the Chemical Knowledge Network (CKN) website. The top navigation bar includes links for Home, My Workspace, Site Map, My Favorites, Quick Links, and Self Service. Below this, there are sections for Featured Links, News and Announcements, and a main content area with articles. The bottom section contains a table of DOTMLPF Links categorized by Doctrine, Organization, Training, Material, Leadership, Personnel, and Facilities.

Doctrine	Organization	Training	Material	Leadership	Personnel	Facilities
		<ul style="list-style-type: none"><li>CBRN Basic Chemistry Course (dL)</li><li>USACBRNS Training Materials: This site contains training materials used by the U.S. Army CBRN School to train CBRN Warfighters.</li><li>2007 CBRN Warfighter CTSS Information and Read-Ahead Packet</li><li>WMD Elimination: Technical Escort Units</li><li>Contamination Avoidance (Sense): CBRN Reconnaissance Platoon (With Digital) Collective Task List</li></ul>				
			<ul style="list-style-type: none"><li>CBRN Protection (Shield) Continued: Submit Nuclear, Biological, and Chemical (NBC) 1 Reports</li><li>Supervise the Employment of Nuclear, Biological, and Chemical (NBC) Markers</li><li>Implement Mission-Oriented Protective Posture (MOPP)</li><li>Operate the AN/UDR-2 Radiac Set</li><li>Operate the AN/UDR-13 Radiac Set</li><li>Report Chemical, Biological, Radiological, and Nuclear (CBRN) Information Using NBC 4 Reports</li></ul>			

## Includes:

- Links to dL Courses
- Training Support Packages for unit training (over 69% of schoolhouse lessons are available to the Warfighter)
- Performance Tasks – Collective & Individual
- Job Aids
- Handbooks
- Doctrine
- Lessons Learned
- Best Practices
- Includes Consequence Management material

You'll find the link at:

<http://www.wood.army.mil/cbrns/>





# Facilities







# ***International Initiatives***







# ***Key International Interactions***

- **CBRN International Commander's and Commandant 's Conference**
- **CBRN NATO Training Work Group**
- **NATO Joint Combat Developer Work Group**
- **NATO CBRN Operations Work Group**
- **NATO Allied Joint Publication 3.8, CBRN Doctrine for NATO Forces**
- **NATO Allied Tactical Publication/Allied Engineering Publication -45, CBRN Warning and Reporting**
- **ABCA Project Teams- Developed a Standard for SSE**
- **Attendance at International Trade Conferences**
- **BI Lateral Agreements working with OSD and Joint Staff**
  - **Czech Republic**
  - **Korea**
  - **Poland**
  - **Japan**
  - **Singapore**





# ***Transformation***

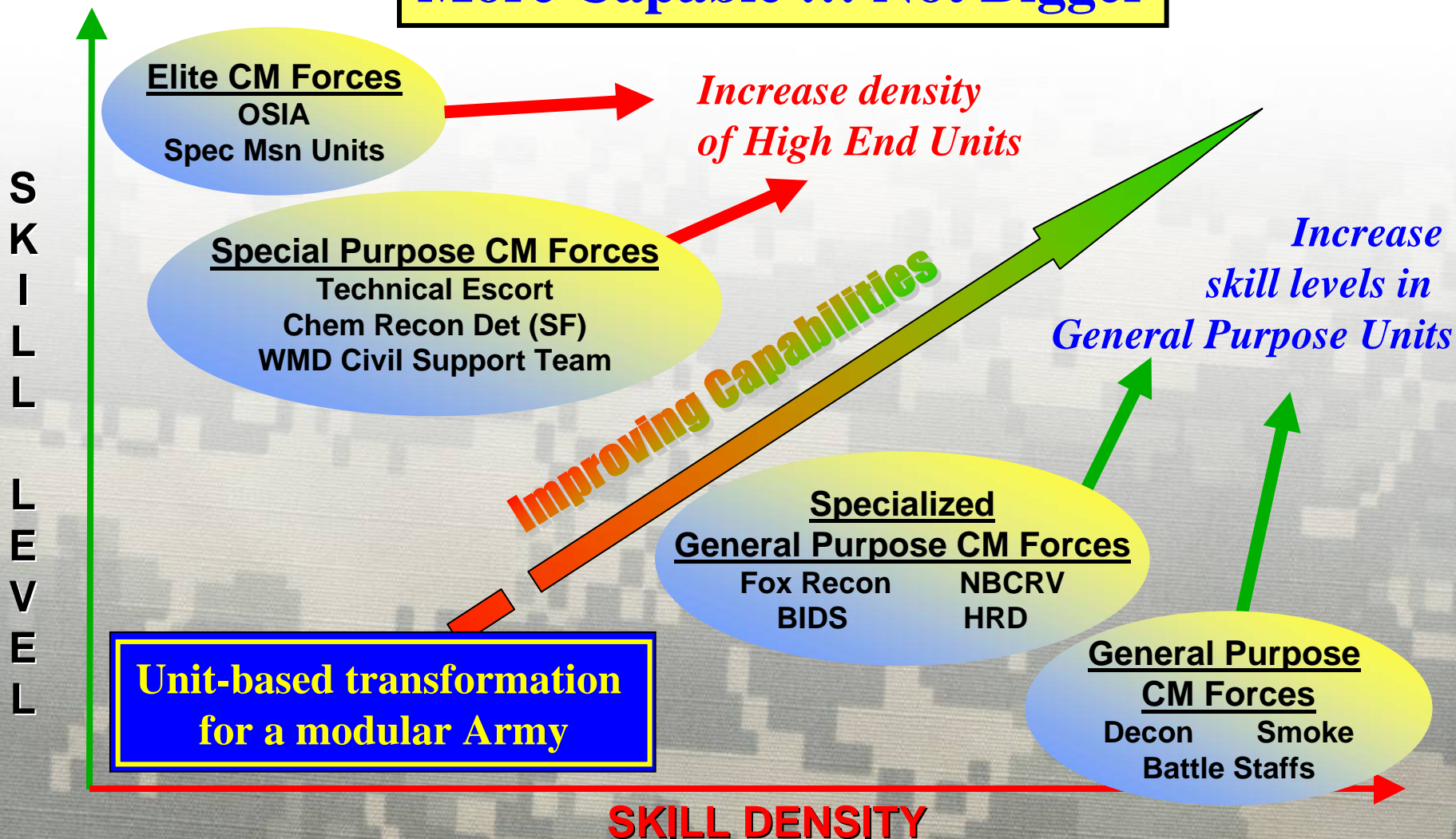






# Transformation Strategy

**More Capable ... Not Bigger**







# ***Summary***

- **CBRN Threats to the Nation will continue**
- **Transforming CBRN doctrine to meet these challenges**
- **Need Joint, Interagency, Intergovernmental, and Multi-national solutions**
- **Realistic experimentation reduces the risk and cost of material solutions**
- **Transforming the CBRN community to meet these challenges**





***Questions?***





# ***Backup***





# Joint Aircrew Duration in Protective Ensemble (JADPE)

- **Problem:**
  - Determine the crew duty day of aircrews while wearing Individual Protective Ensemble (IPE)
- **Funding:** JRO
- **Location:**
  - C-130 trials at Little Rock AFB, AR
  - C17 trials at Travis AFB, CA
- **Recommendations:**
  - Identified how long aircrews can safely fly while wearing IPE
- **Result:**
  - Validated crew duty day required to shuttle contaminated aircraft from forward locations to decon and/or weathering areas or to shuttle between contaminated Air Port of Debarkation and Exchange Zone

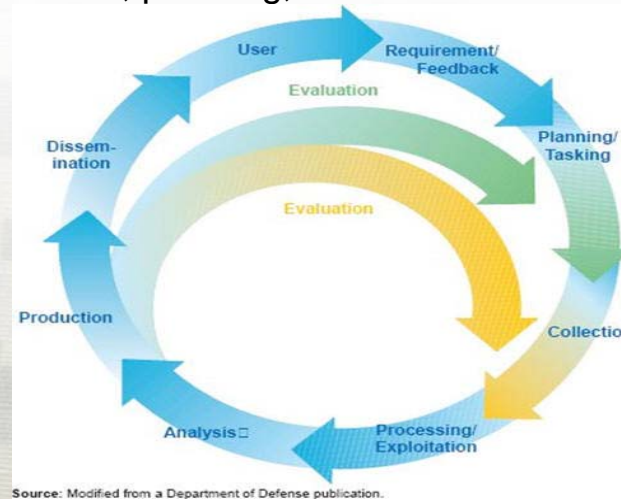






# CBRN Intelligence Fusion

- **Problem:**
  - Joint forces require effective mechanisms for CBRN intelligence fusion
    - Tactical, operational, and strategic levels
    - Facilitate unified coordination, planning, and execution for combating weapons of mass destruction
- **Funding:** JRO
- **Location:**
  - Republic of Korea
  - JFCOM J9, Suffolk, VA
- **Recommendations:**
  - All CBRN Warfighters possess the appropriate security clearances
  - Tiered access to CBRNE related intelligence thru the MASINT Portal
  - CBRN site information be maintained with the similar fidelity as Target Folders
    - Called Elimination Folders
- **Result:**
  - Greater knowledge and interaction between Joint CBRN Community and the Intelligence Community



Source: Modified from a Department of Defense publication.







# Unmanned Chemical, Biological, and Radiological Systems (UCBRS)

- **Problem:**

- Current operational concepts do not account for ground, sea and air unmanned systems
  - Employing CBR sensor or collector packages
  - Interoperable with and expand on the manned reconnaissance and surveillance systems across the Cbt WMD mission areas



- **Funding:** JRO

- **Location:** Arlington, VA

- **Recommendations:**

- Training should include how to operate in a Joint environment integrating air, ground and sea UCBRS for a unified employment approach
- As technology becomes available capabilities development documents will need to stress modular payloads and plug and play systems that are reliable and capable of detection, sampling, transmitting data, and interoperability with other than CBR sensor suites

- **Result:**

- A broad operational concept will be developed as part of the experiment final report





# CBRN Hazardous Awareness and Understanding



- **Problem:**

- There is no written future joint concept for CBRN hazard awareness and understanding
- Joint force capabilities may not provide the Joint Force Commander with CBRN hazard awareness and understanding throughout his operational area
  - 2016-2028 time frame

- **Funding:** JRO

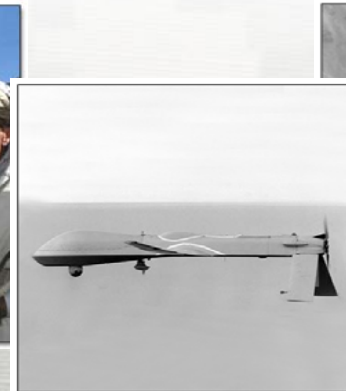
- **Location:** Arlington, VA

- **Recommendations:**

- Develop concept to describe how the Joint Force Commander will achieve CBRN hazard awareness and understanding
  - Must support the four basic types of military activity: combat, security, engagement, and relief/reconstruction
  - In the year 2028

- **Result:**

- A broad operational concept will be developed as part of the experiment final report







# CBRNC3 Technical/Common Course Map



- Transition to Seminar Formats
- Increased Integration-Maneuver Support
- Focus on JIIM
- Visiting Instructors (ECBC, DTRA, WDTC, UMR)

Leadership / Foundations	Operational Foundations	Non-Proliferation	Counter-Proliferation	Chemical Block	Biological Block
<ul style="list-style-type: none"> <li>• No major change</li> <li>• TRADOC mandated</li> </ul>	<ul style="list-style-type: none"> <li>• DofCS Classes</li> <li>• JIIM</li> <li>• MCS-L/JEM/JWARN</li> <li>• Opn Protection</li> </ul>	<ul style="list-style-type: none"> <li>• WMD Strategy</li> <li>• ECBC</li> <li>• Policy</li> <li>• WMD Technology</li> </ul>	<ul style="list-style-type: none"> <li>• Policy/WMD-E</li> <li>• DTRA</li> <li>• Interdiction / Offensive Ops</li> </ul>	<ul style="list-style-type: none"> <li>• Masters Level</li> <li>• TIC / traditional</li> <li>• Chemistry of Explosives</li> </ul>	<ul style="list-style-type: none"> <li>• Masters Level</li> <li>• Research Project</li> <li>• Production</li> <li>• CKN/JKO/DKO</li> </ul>
Radiological / Nuclear Block	Active/Passive Defense	HAZMAT AWS/OPS	ICS NRP/NIMS	Consequence Management	STX
<ul style="list-style-type: none"> <li>• OPRAD focus</li> <li>• RDD</li> <li>• Response</li> <li>• Digital Tac Rad</li> </ul>	<ul style="list-style-type: none"> <li>• VA</li> <li>• JEM Exercises</li> <li>• IED Defeat TCOIC</li> <li>• Mass Casualty</li> </ul>	<ul style="list-style-type: none"> <li>• 3 weeks (TIC/PDE)</li> <li>• Sampling</li> <li>• SSE / TSE</li> <li>• Detector Tech Ex</li> </ul>	<ul style="list-style-type: none"> <li>• Incident Command Certification</li> <li>• HLD Integration</li> <li>• CSMRF</li> </ul>	<ul style="list-style-type: none"> <li>• DoD in CM and FCM</li> <li>• Legal aspects</li> <li>• 3 day exercise</li> <li>• ECBC</li> </ul>	<ul style="list-style-type: none"> <li>• CM Capstone</li> <li>• TSE / SSA</li> <li>• Terry Facility</li> <li>• Response Planning</li> </ul>
Ozark Fury	Warfighter III	Company Command	<ul style="list-style-type: none"> <li>• No Growth</li> <li>• 5.3 weeks Common Core</li> <li>• 14 weeks Technical Block</li> </ul>		
<ul style="list-style-type: none"> <li>• WFX III Scenario</li> </ul>	<ul style="list-style-type: none"> <li>• Change to CTL</li> <li>• Updated scenario</li> </ul>	<ul style="list-style-type: none"> <li>• Scenario Driven</li> <li>• Rear – D</li> <li>• Casualty Ops</li> <li>• WTU</li> </ul>			
Technical Block	Common Core				





# ***Operational Update***







# Threats







# Operational Update

As of: 17 Jun 09

## Iraq/ MNC-I/MNDs

I Corps 1 CD  
25 ID 34 ID

## CBRN Units Assigned:

Co/22nd CM Bn (Tech Escort)  
1/1 CD Recon Plt (FOX)  
2/1 CD Recon Plt (FOX)  
3/1 CD Recon Plt (FOX)  
4/1 AD Recon Plt (FOX)  
2/1 ID Recon Plt (FOX)  
2/4 ID Recon Plt (FOX)  
172 IN Recon Plt (FOX)  
1/25<sup>th</sup> ID Recon Plt (SNBCRV)  
3/25<sup>th</sup> ID Recon Plt (SNBCRV)  
6/28<sup>th</sup> ID Recon Plt (SNBCRV)  
4/59 CM Co (HAZMAT Plt)  
3/82 ABN Recon Plt



Afghanistan/CJTF  
82<sup>nd</sup> ABN Div

CBRN Units Assigned:  
21 CM Co (-)\*

Kuwait/ARCENT  
3<sup>rd</sup> Army  
CBRN Units Assigned

61<sup>st</sup> CM Co (Recon Plt)

## Scheduled for Deployment

3 ID (repl. 25ID)  
HHD, 490<sup>th</sup> CM Bn\*  
320<sup>th</sup> CM Co\*  
357<sup>th</sup> CM Co\*  
HHC, 479<sup>th</sup> CM Bn\*

1 AD (repl. 1CD)  
411<sup>th</sup> CM Co\*  
HHD, 472<sup>nd</sup> CM Bn\*  
314<sup>th</sup> CM Co(-) \*

\* Performing non-CBRN mission